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40 years of Leadership in Hydraulic Braking

Titan Brakes and Actuators

Originating under the DICO name, Titan has a rich heritage in the hydraulic brake and actuator industry. Many of the products in use today are based on our designs. We invented and held the first patent on free backing brakes and have led the way on a wide variety of innovations.

Titan's extensive line of brakes, actuators, couplers and hubs is designed to serve a wide variety of trailer applications. Manufacturers of boat, recreation vehicle, livestock, travel and flatbed trailers across North America rely on the performance of our products.

- Training Videos Available

Quality You Can Trust

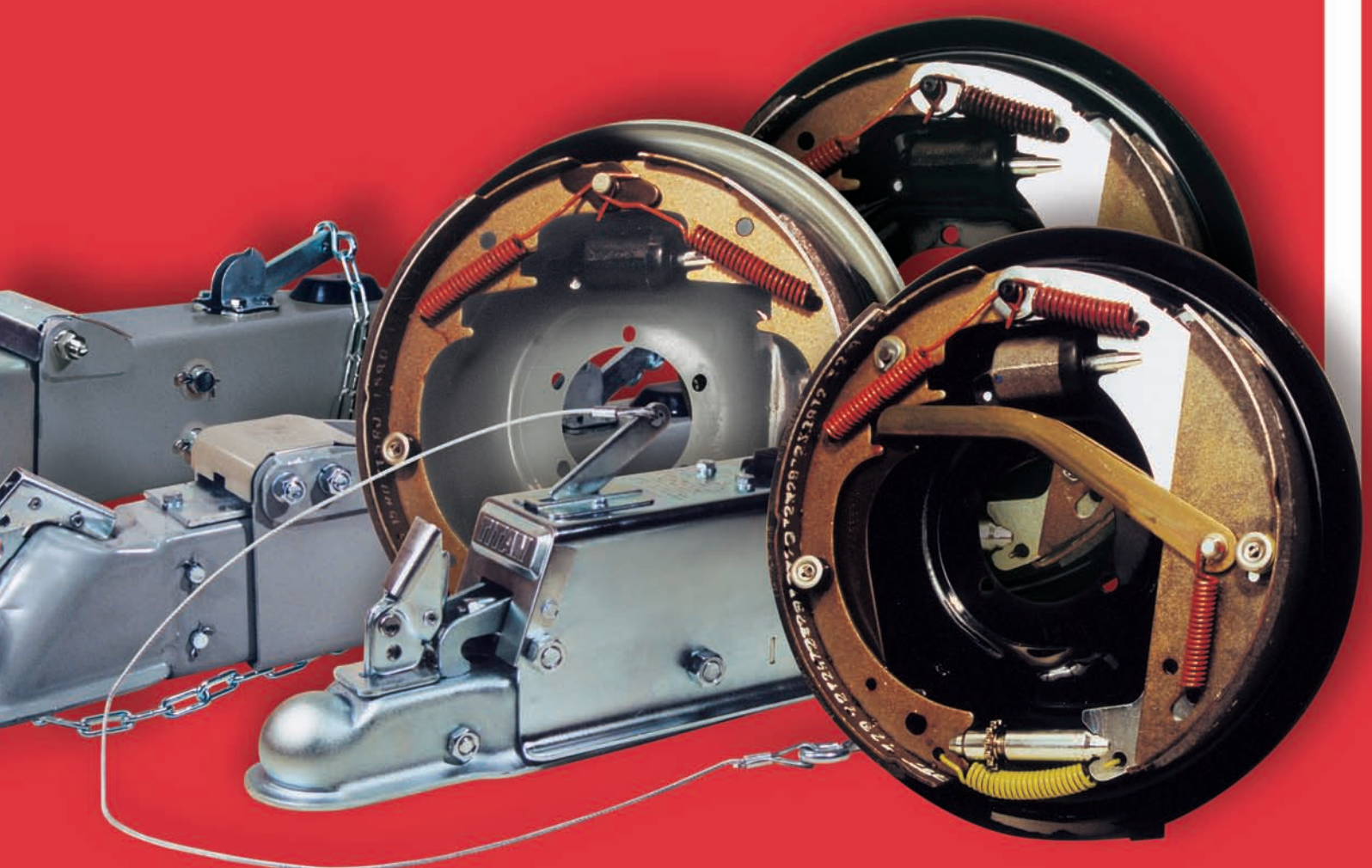
Titan uses the highest quality materials to ensure that our products meet the high demands of our customers. Our assembly plant, located in Des Moines, Iowa, has an ISO-9002 Quality System.

Customer Satisfaction

Titan is committed to achieving customer satisfaction through on-time delivery and by meeting the functional needs of our customers. Titan's trailer components are the perfect complement to the durable highway wheel and tire assemblies offered by Titan.

For more information, call:

800-832-8781



LIMITED WARRANTY

Limited Warranty Titan International (Titan) warrants its products to be free from defects in material and workmanship for one year from date of delivery to the original purchaser when properly installed, used and maintained by the purchaser.

This warranty does not apply to damage or loss caused by any or all of the following circumstances or conditions:

- Freight damage.
- Parts, accessories, materials or components not obtained from or approved in writing by TITAN.
- Misapplication, misuse and failure to follow the directions or observe cautions and warnings on installation, operation, application, inspection or maintenance specified in any TITAN quotation, acknowledgement, sales literature, specification sheet or installation instruction and service manual ("applicable literature").

If any TITAN products are found upon TITAN's examination to have been defective when supplied, TITAN will either: credit the purchaser's account for the purchase price of the TITAN product; replace the TITAN product; or repair the product. TITAN has sole discretion in choosing which option to provide. For this LIMITED WARRANTY to apply, TITAN must receive notice of the alleged defect within 30 days of either the discovery of the alleged defect or the expiration of the warranty period, whichever is earlier. Any claim not made within this period shall conclusively be deemed waived.

If requested by TITAN, purchaser shall return the alleged defective product to TITAN for examination at TITAN's direction and return expense. TITAN will not pay for expenses incurred in returning a product to TITAN without TITAN's prior written authorization. TITAN shall not be liable for any other expenses purchaser incurs to remedy any defect. Purchasers waive subrogation on all claims under any insurance.

Limitation of Liability It is expressly agreed that the liability of TITAN is limited and TITAN does not function as an insurer. THE REMEDIES SET FORTH IN THIS WARRANTY SHALL CONSTITUTE THE EXCLUSIVE REMEDIES AVAILABLE TO THE PURCHASER OR USER AND ARE IN LIEU OF ALL OTHER REMEDIES, EXPRESS OR IMPLIED. THE LIABILITY OF TITAN, WHETHER IN CONTRACT, IN TORT, UNDER ANY WARRANTY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE OF THE PARTICULAR PRODUCT MANUFACTURED, SOLD OR SUPPLIED BY TITAN.

(limited warranty continues to next page)

To Obtain Technical Assistance To enable TITAN to respond to a request for assistance or evaluation of customer or user operating difficulty, please provide at a minimum the following information by calling **1-800-832-8781**:

- Model number, serial number and all other data on the specific component which appears to be involved in the difficulty.
- The date and from whom you purchased your TITAN product.
- State your difficulty, being sure to mention at least the following: Application, Nature of load involved, and Weight of the load.

Field Service If field service at the request of the purchaser is rendered and the difficulty is found not to be with TITAN's product, the purchaser shall pay the time and expense (at the prevailing rate at the time of service) of seller's field representative(s). Charges for service, labor and other expenses that have been incurred by the purchaser, its customer or agent without prior written authorization of TITAN will not be accepted.

TITAN EXTENDS NO WARRANTY, EXPRESS OR IMPLIED, ON PRODUCTS NOT MANUFACTURED BY TITAN OR TO TITAN'S DESIGN SPECIFICATION, INCLUDING BUT NOT LIMITED TO SUCH ITEMS AS NON-TITAN TIRES, BRAKES, ACTUATORS, BEARINGS, HOSE AND TUBING. PURCHASER'S RECOURSE SHALL BE LIMITED TO ANY WARRANTY OF THE RESPECTIVE MANUFACTURERS.

THIS WARRANTY EXCLUDES ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY PURPOSE.

THIS WARRANTY DOES NOT COVER NOR EXTEND TO INCIDENTAL OR CONSEQUENTIAL DAMAGE. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

No representative has authority to make any representation, promise or agreement except as stated in this Limited Warranty. TITAN reserves the right to make design and other changes upon its products without any obligation to install the same on any previously sold or delivered products.

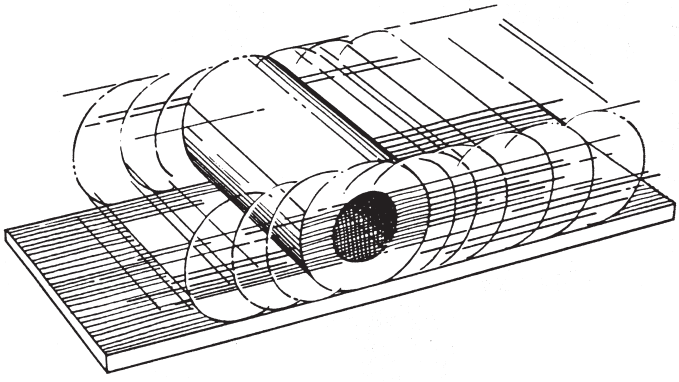
THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THOSE DESCRIBED ABOVE. EFFECTIVE JANUARY 1, 1998 THIS WARRANTY SUPERSEDES ALL PRIOR WARRANTIES, WRITTEN OR IMPLIED.

FOR WARRANTY CLAIMS CALL: 800-872-2327

Titan Distribution, Inc.
2345 East Market Street
Des Moines, IA 50317
PH: 800-832-8781 FAX: 515-265-9379

DESIGN FEATURES

ACTUATOR MOVEMENT



The straight line movement of the actuator is accomplished by using rollers to reduce resistance so that the kinetic energy of a loaded trailer can be translated into braking effort.

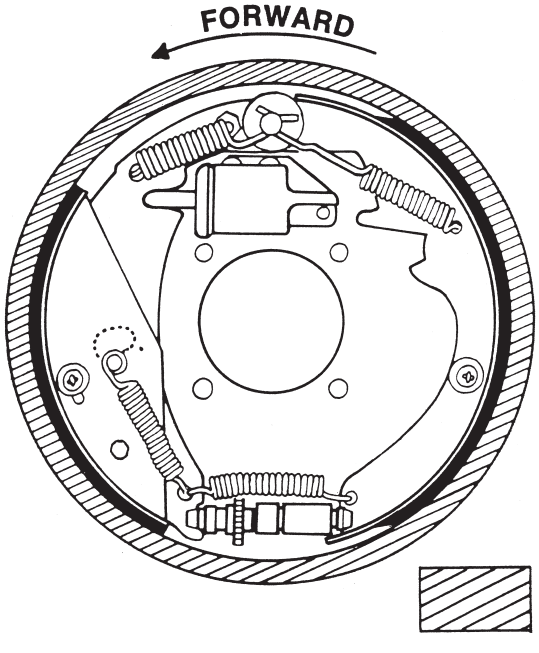
This design consists of a tubing assembly to meet applicable specifications for tongue load plus needed strength for side load. The side load strength is particularly to resist bending in jackknife situations.

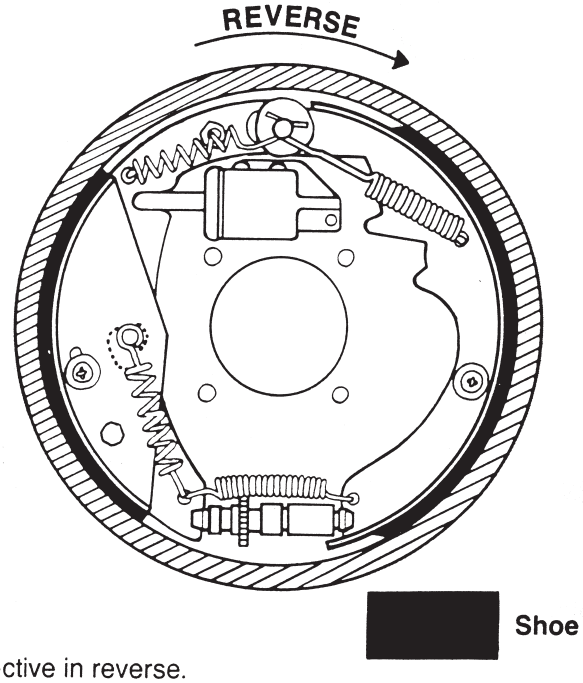
TITAN FREE BACKING BRAKES
ALLOWS YOU TO BACK UP WITH OUR BRAKING SYSTEM

HERE IS THE WAY IT WORKS:

As wheel revolves forward, outward movement of shoe lever engages brake shoe with drum providing full braking action.

As wheel moves in reverse, shoes turn with drum until lining pressure is released. Hydraulic pressure is contained by the cylinder.





Free backing brakes are not effective in reverse.

TITAN BRAKES

TITAN MANUFACTURES BRAKES FOR:

Trailers towed by tongue or tow-bar.

Self-propelled industrial vehicles and carts.

Industrial machines and equipment that require brakes.

Titan brakes are hydraulically operated by one of two means. They are motivated by the surge, or inertia of the trailer or electric over hydraulic.

Titan surge brakes require no connection to the towing vehicle other than ball or clevis hitch. They operate automatically by the “PUSH” of the trailer against the towing vehicle and are applied in direct relationship to the deceleration rate of the towing vehicle.

Corrosion resistant marine braking systems available.

Brake Features:

The trailer brakes are available on systems where surge, hydraulic and mechanical control is desired.

In addition to the hydraulic controls, a separate cable (2385200) may be purchased to provide a parking brake. (See Page 44)

Free backing brakes are not effective if the trailer is moving in reverse during breakaway.

Limited Warranty Titan Inc. (“TITAN”) warrants its products to be free from defects in material and workmanship for one year from date of delivery to the original purchaser when properly installed, used and maintained by the purchaser.

Titan warrants its complete braking systems (TITAN PREMIER, MARINE & STANDARD brakes, TITAN hubs/drums, and TITAN actuators) to be free from defects in material and workmanship for two years when properly installed, used and maintained.

TITAN warrants that the PREMIER BRAKE will be free from a corrosion-related failure of brake components for two years when properly installed, used and maintained.

This warranty does not apply to damage or loss caused by any or all of the following circumstances or conditions:

- Freight damage
- Parts, accessories, materials or components not obtained from or approved in writing by TITAN. Misapplication, misuse and failure to follow the directions or observe cautions and warnings on installation, operation, application, inspection or maintenance specified in any TITAN quotation, acknowledgement, sales literature, specification sheet or installation instruction and service manual (“applicable literature”).

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Limitation of Liability **It is expressly agreed that the liability of TITAN is limited and TITAN does not function as an insurer.** THE REMEDIES SET FORTH IN THIS WARRANTY SHALL CONSTITUTE THE EXCLUSIVE REMEDIES AVAILABLE TO THE PURCHASER OR USER AND ARE IN LIEU OF ALL OTHER REMEDIES, EXPRESSED OR IMPLIED. THE LIABILITY OF TITAN, WHETHER IN CONTRACT, IN TORT, UNDER ANY WARRANTY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE OF THE PARTICULAR PRODUCT MANUFACTURED, SOLD OR SUPPLIED BY TITAN.

Technical Assistance To enable TITAN to respond to a request for assistance or evaluation of customer or user operating difficulty, please provide, at a minimum, the following information by calling 1-800-832-8781. 1) Model number, serial number, or all other data on the specific component which appears to be involved in the difficulty. 2) The data and from whom you purchased your TITAN product. 3) State your difficulty being sure to mention at least the following: application, nature of load involved and weight of the load.

Field Service If field service, at the request of the purchaser, is rendered and the difficulty is found not to be with TITAN’S product, the purchaser shall pay the time and expense (at the prevailing rate at the time of service) of seller(s) field representative(s). Charges for service, labor and other expenses that have been incurred by the purchaser, its customer or agent, without prior written authorization from TITAN, will not be accepted.

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THIS WARRANTY DOES NOT COVER NOR EXTEND TO INCIDENTAL OR CONSEQUENTIAL DAMAGE. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

No representative has authority to make any representation, promise or agreement except as stated in this Limited Warranty. TITAN reserves the right to make design and other changes upon its products without any obligation to install the same on any previously sold or delivered products.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THOSE DESCRIBED ABOVE. EFFECTIVE JULY 1, 1991, THIS WARRANTY SUPERSEDES ALL PRIOR WARRANTIES, WRITTEN OR IMPLIED.

DUE TO THE WIDE VARIATION IN USES TO WHICH TITAN PRODUCTS (WHEELS, HUBS, BRAKES, ETC.) ARE SUBJECTED BY USERS, WE ARE UNABLE TO SPECIFY CARRYING CAPACITIES OR SPEEDS FOR A PARTICULAR APPLICATION. THEREFORE, THE MANUFACTURER MUST TEST HIS EQUIPMENT UNDER THE MOST SEVERE CONDITIONS TO DETERMINE THAT TITAN PRODUCTS ARE SUITABLE.

PNEUMATIC TIRE WARNING: DANGER ONLY SPECIALLY TRAINED PERSONS USING PROPER EQUIPMENT SHALL MOUNT OR DEMOUNT PNEUMATIC TIRES. SERIOUS OR FATAL INJURIES CAN RESULT FROM USING IMPROPER MOUNTING PROCEDURES.

DISC BRAKES

3500 LB. DISC BRAKE AXLE SET PART NUMBERS

E-coated rotor, caliper and mounting bracket.

Part No.	Axle Capacity	Rotor Size	# of Bolts	Bolt Circle	Wheel Bolt Diameter	Flange Diameter	# of Flange Bolts	Fits Wheel Size	Qty. per Pallet	Weight-Axle Set (Lbs.)
T2RCM10E	3500 lbs.	10”	5	4.5”	1/2”	6.5”	4	14” and larger	35	52
T2RCM10EKIT	3500 lbs.	10”	5	4.5”	1/2”	6.5”	4	14” and larger	27	52

The part number with “KIT” suffix will have the components for one complete axle individually boxed.

Rotor, caliper and mounting brackets all stainless steel: individually boxed

Part No.	Axle Capacity	Rotor Size	# of Bolts	Bolt Circle	Wheel Bolt Diameter	Flange Diameter	# of Flange Bolts	Fits Wheel Size	Qty. per Pallet	Weight-Axle Set (Lbs.)
T2RCM10SSKIT	3500 lbs.	10”	5	4.5”	1/2”	6.5”	4	14” and larger	35	52

E-coated integral hub/rotor, caliper and mounting bracket

Part No.	Axle Capacity	Rotor Size	# of Bolts	Bolt Circle	Wheel Bolt Diameter	Flange Diameter	# of Flange Bolts	Fits Wheel Size	Qty. per Pallet	Weight-Axle Set (Lbs.)
T2HRCM10E	3500 lbs.	10”	5	4.5”	1/2”	6.5”	4	13” and larger	32	56
T2HRCM10EKIT	3500 lbs.	10”	5	4.5”	1/2”	6.5”	4	13” and larger	27	56

The part number with “KIT” suffix will have the components for one complete axle individually boxed.

Hub/rotor, caliper, and mounting bracket all silver cad plated: individually boxed

Part No.	Axle Capacity	Rotor Size	# of Bolts	Bolt Circle	Wheel Bolt Diameter	Flange Dia.	# of Flange Bolts	Fits Wheel Size	Qty. per Pallet	Weight-Axle Set (Lbs.)
T2HRCM10SCADKIT	3500 lbs.	10”	5	4.5”	1/2”	6.5”	4	13” and larger	27	56

DISC BRAKES

5200 LB. AND 6000 LB. DISC BRAKE AXLE SET PART NUMBERS

E-coated rotor, caliper and mounting bracket.

Part No.	Axle Capacity	Rotor Size	# of Bolts	Bolt Circle	Wheel Bolt Diameter	Flange Diameter	# of Flange Bolts	Fits Wheel Size	Qty. per Pallet	Weight-Axle Set (Lbs.)
T2RCM12E	5200 / 6000 lbs	12”	6	5.5”	1/2”	7.5”	5	15” and larger	30	61
T2RCM12EKIT	5200 / 6000 lbs	12”	6	5.5”	1/2”	7.5”	5	15” and larger	27	61

The part number with “KIT” suffix will have the components for one complete axle individually boxed.

Rotor, caliper and mounting bracket all stainless steel, individually boxed.

Part No.	Axle Capacity	Rotor Size	# of Bolts	Bolt Circle	Wheel Bolt Diameter	Flange Diameter	# of Flange Bolts	Fits Wheel Size	Qty. per Pallet	Weight-Axle Set (Lbs.)
T2RCM12SSKIT	5200 / 6000 lbs	12”	6	5.5”	1/2”	7.5”	5	15” and larger	27	66

E-coated hub/rotor. Caliper, and mounting bracket.

Part No.	Axle Capacity	Rotor Size	# of Bolts	Bolt Circle	Wheel Bolt Diameter	Flange Diameter	# of Flange Bolts	Fits Wheel Size	Qty. per Pallet	Weight-Axle Set (Lbs.)
T2HRCM12E	5200 / 6000 lbs	12”	6	5.5”	1/2”	7.5”	5	15” and larger	21	85
T2HRCM12EKIT	5200 / 6000 lbs	12”	6	5.5”	1/2”	7.5”	5	15” and larger	27	85

The part number with “KIT” suffix will have the components for one complete axle individually boxed.

DISC BRAKES

7000 LB. AND 8000 LB. DISC BRAKE AXLE SET PART NUMBERS

Rotor with standard automotive finish, with E-coated caliper and mounting bracket.

Part No.	Axle Capacity	Rotor Size	# of Bolts	Bolt Circle	Wheel Bolt Diameter	Flange Diameter	# of Flange Bolts	Fits Wheel Size	Qty. per Pallet	Weight-Axle Set (Lbs.)
T2RCM13378	7000 lbs.	13”	8	6.5”	1/2”	8.5”	5	16” and larger	23	78
T2RCM13378KIT	7000 lbs.	13”	8	6.5”	1/2”	8.5”	5	16” and larger	27	78

The part number with “KIT” suffix will have the components for one complete axle individually boxed.

Rotor with standard automotive finish, with E-coated caliper and mounting bracket.

Part No.	Axle Capacity	Rotor Size	# of Bolts	Bolt Circle	Wheel Bolt Diameter	Flange Diameter	# of Flange Bolts	Fits Wheel Size	Qty. per Pallet	Weight-Axle Set (Lbs.)
T2RCM13389	8000 lbs.	13”	8	6.5”	9/16”	8.5”	4	16” and larger	23	79
T2RCM13389KIT	8000 lbs.	13”	8	6.5”	9/16”	8.5”	4	16” and larger	27	79

The part number with “KIT” suffix will have the components for one complete axle individually boxed.

Rotor with standard automotive finish, with E-coated caliper and mounting bracket.

Part No.	Axle Capacity	Rotor Size	# of Bolts	Bolt Circle	Wheel Bolt Diameter	Flange Diameter	# of Flange Bolts	Fits Wheel Size	Qty. per Pallet	Weight-Axle Set (Lbs.)
T2RCM133810	8000 lbs.	13”	8	6.5”	5/8”	8.5”	4	16” and larger	23	79
T2RCM133810KIT	8000 lbs.	13”	8	6.5”	5/8”	8.5”	4	16” and larger	27	79

The part number with “KIT” suffix will have the components for one complete axle individually boxed.

DRUM BRAKES

NOTE: Premier Brakes have 2-year Corrosion Warranty

8½” x 2¼” Freebacking Trailer Brake

The 8½” x 2¼” brake has 37 square inches of bonded lining. This brake is for use with Surg-O-Matic actuators and most 10”, 12”, and 13” wheels. Plus features are plated parts to resist corrosion and the exclusive patented DICO back-up feature. 3,000 lb. axle rating 60 SQ. IN. SWEPT AREA

Right/Left	Part No.	No. of Bolts	Bolt Circle	Center Hole Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
Right	4442000	4	4”	3”	GALPHORITE	9	60	*NON-STD
Left	4442100	4	4”	3”	GALPHORITE	9	60	*NON-STD

*Non-Standard clusters require minimum 8-week lead time and minimum quantity may be required.

10” x 2¼” Trailer Brake

The 10” x 2¼” brake has 44 square inches of lining. This brake is to be used with Surg-O-Matic actuators and with 13”, 14” and 15” wheels. Uni-Servo brakes have 20% braking in reverse. GALPHORITE (MARINE) BRAKES AVAILABLE FOR GREATER CORROSION RESISTANCE. See page 63.

10” Premier Freebacking

3,750 lb. axle rating 71 SQ. IN. SWEPT AREA

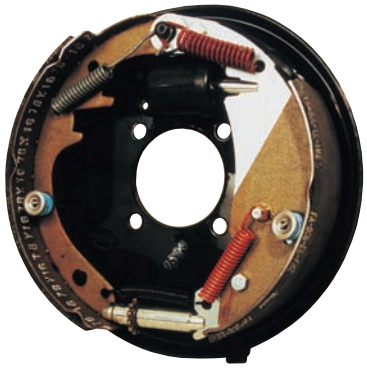
Right/Left	Part No.	No. of Bolts	Bolt Circle	Center Hole Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
Right	4423400	4	4”	3”	GALPHORITE	10	50	STD
Left	4423500	4	4”	3”	GALPHORITE	10	50	STD

10” Premier Freebacking with Park Brake

3,750 lb. axle rating 71 SQ. IN. SWEPT AREA

Right/Left	Part No.	No. of Bolts	Bolt Circle	Center Hole Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
Right	4423600	4	4”	3”	GALPHORITE	10	50	*NON-STD
Left	4423700	4	4”	3”	GALPHORITE	10	50	*NON-STD

*Non-Standard clusters require minimum 8-week lead time and minimum quantity may be required.



10” x 2¼” Premier Uni-Servo

3,750 lb. axle rating 71 SQ. IN. SWEPT AREA

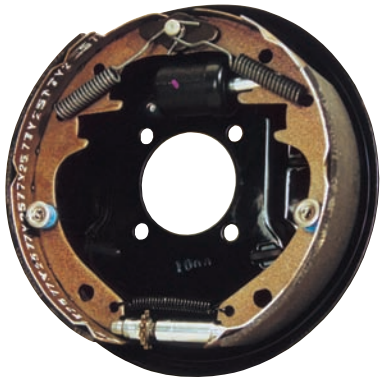
Right/Left	Part No.	No. of Bolts	Bolt Circle	Center Hole Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
Right	4445300	4	4”	3”	GALPHORITE	10	50	STD
Left	4445400	4	4”	3”	GALPHORITE	10	50	STD

10” x 2¼” Standard Freebacking

3,750 lb. axle rating 71 SQ. IN. SWEPT AREA

Right/Left	Part No.	No. of Bolts	Bolt Circle	Center Hole Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
Right	4071500	4	4”	3”	BLACK	10	50	STD
Left	4071600	4	4”	3”	BLACK	10	50	STD
Right	4522800	4	4”	3”	GALVANIZED	10	50	*NON-STD
Left	4522900	4	4”	3”	GALVANIZED	10	50	*NON-STD

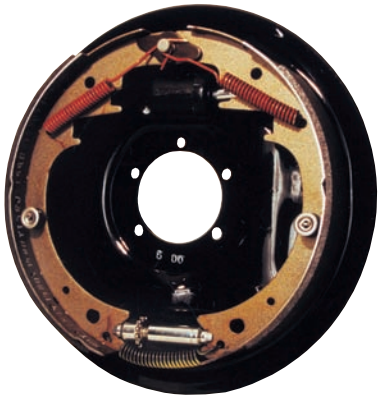
*Non-Standard clusters require minimum 8-week lead time and minimum quantity may be required.



10” x 2¼” Uni-Servo Non-Premier

3,750 lb. axle rating 71 SQ. IN. SWEPT AREA

Right/Left	Part No.	No. of Bolts	Bolt Circle	Center Hole Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
Right	1878700	4	4”	3”	BLACK	10	50	STD
Left	1878800	4	4”	3”	BLACK	10	50	STD



12” x 2” Trailer Brake

The 12” x 2” brake has 46 square inches of lining. This brake is to be used with Surg-O-Matic actuators and with 14.5”, 15” and 16” wheels. Uni-Servo brakes have 20% braking in reverse. GALPHORITE (MARINE) BRAKES AVAILABLE FOR GREATER CORROSION RESISTANCE. See page 63.

12” x 2” Uni-Servo Trailer Brake

6,000 lb. axle rating 75 SQ. IN. SWEPT AREA

Right/Left	Part No.	No. of Bolts	Bolt Circle	Center Hole Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
Right	2351000	5	3⅞”	3¼”	BLACK	13	30	STD
Left	2351100	5	3⅞”	3¼”	BLACK	13	30	STD

12” x 2” Uni-Servo Trailer Brake with Parking Brake

6,000 lb. axle rating 75 SQ. IN. SWEPT AREA

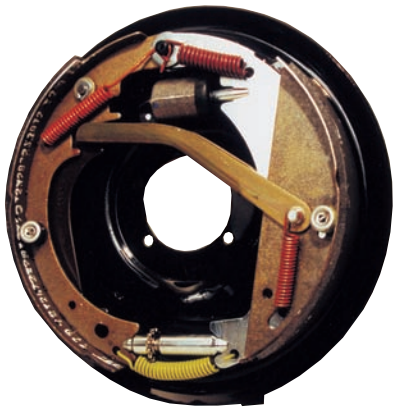
Right/Left	Part No.	No. of Bolts	Bolt Circle	Center Hole Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
Right	2351200	5	3⅞”	3¼”	BLACK	14	30	*NON-STD
Left	2351300	5	3⅞”	3¼”	BLACK	14	30	*NON-STD

*Non-Standard clusters require minimum 8-week lead time and minimum quantity may be required.

12” x 2” Standard Freebacking Trailer Brake

6,000 lb. axle rating 75 SQ. IN. SWEPT AREA

Right/Left	Part No.	No. of Bolts	Bolt Circle	Center Hole Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
Right	4202800	5	3⅞”	3¼”	BLACK	15	30	STD
Left	4202900	5	3⅞”	3¼”	BLACK	15	30	STD



12” x 2” Standard Freebacking with Parking Brake

6,000 lb. axle rating 75 SQ. IN. SWEPT AREA

Right/Left	Part No.	No. of Bolts	Bolt Circle	Center Hole Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
Right	4203000	5	3⅞”	3¼”	BLACK	17	30	*NON-STD
Left	4203100	5	3⅞”	3¼”	BLACK	17	30	*NON-STD

*Non-Standard clusters require minimum 8-week lead time and minimum quantity may be required.

12” x 2” Galvanized Freebacking

6,000 lb. axle rating 75 SQ. IN. SWEPT AREA

Right/Left	Part No.	No. of Bolts	Bolt Circle	Center Hole Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
Right	4523200	5	3⅞”	3¼”	GALVANIZED	15	30	*NON-STD
Left	4523300	5	3⅞”	3¼”	GALVANIZED	15	30	*NON-STD

*Non-Standard clusters require minimum 8-week lead time and minimum quantity may be required.

12” x 2” Premier Freebacking Trailer Brake

6,000 lb. axle rating 75 SQ. IN. SWEPT AREA

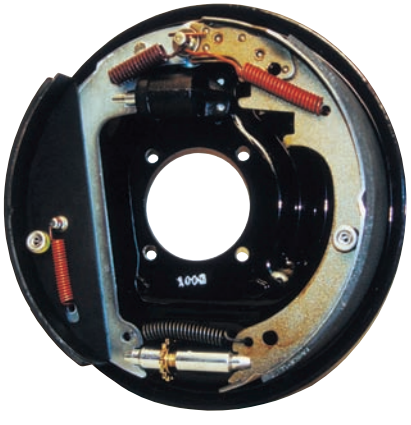
Right/Left	Part No.	No. of Bolts	Bolt Circle	Center Hole Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
Right	4489500	5	3⅞”	3¼”	GALPHORITE	15	30	STD
Left	4489600	5	3⅞”	3¼”	GALPHORITE	15	30	STD

12” x 2” Standard Duo-Servo without Parking Brake

6,000 lb. axle rating 75 SQ. IN. SWEPT AREA

Right/Left	Part No.	No. of Bolts	Bolt Circle	Center Hole Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
Right	2349000	5	3⅞”	3¼”	BLACK	13	30	*NON-STD
Left	2349100	5	3⅞”	3¼”	BLACK	13	30	*NON-STD

*Non-Standard clusters require minimum 8-week lead time and minimum quantity may be required



13” x 2½” Freebacking Trailer Brake

The 13” x 2¼” hydraulic brake has 65 square inches of lining. It is for use with Surg-O-Matic actuators and 15” and larger wheels.
6,500 lb. axle rating 102 SQ. IN. SWEPT AREA

Right/Left	Part No.	No. of Bolts	Bolt Circle	Center Hole Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
Right	0965100	4	4.8”	3.9”	BLACK	23	30	STD
Left	0965200	4	4.8”	3.9”	BLACK	23	30	STD

13” x 2½” Duo-Servo with Special Cylinder Cups

For use with Hydraulic Oil only - operate in both forward and reverse direction

Right/Left	Part No.	No. of Bolts	Bolt Circle	Center Hole Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
*Right	4718600	4	4.8”	3.9”	BLACK	22	30	*NON-STD
*Left	4718700	4	4.8”	3.9”	BLACK	22	30	*NON-STD

*For high pressure hydraulic systems

*Non-Standard clusters require minimum 8-week lead time and minimum quantity may be required

NOTE: "Complete" in the description column consists of seals, nuts, cones and dust caps as required.

8½" x 2¼" Hub and Drum with cups and bolts

Part No.	Bearings	No. of Bolts	Bolt Circle	Seal Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
1540500CB042		5	4.5		Cup & Bolt	20	64	STD
1544500042	1 3/8"x1 1/16"	5	4.5	1.718	Complete	22	64	STD
1662600CB042		5	5.5		Cup & Bolt	20	64	*NON-STD
1662200042	1 3/8"x1 1/16"	5	4.5	1.718	Complete	22	64	*NON-STD

*Non-Standard clusters require minimum 8-week lead time and minimum quantity may be required

10" x 2¼" Hub and Drum with cups and bolts

Part No.	Bearings	No. of Bolts	Bolt Circle	Seal Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
*1543900CB042		5	4.5		Cup & Bolt	22	48	STD
*1544600042	1 3/8"x1 1/16"	5	4.5	1.718	Complete	24	48	STD
1554400CB042		5	4.5		Cup & Bolt	22	48	STD
1554500042	1 3/8"x1 1/16"	5	4.5	1.718	Complete	23	48	STD

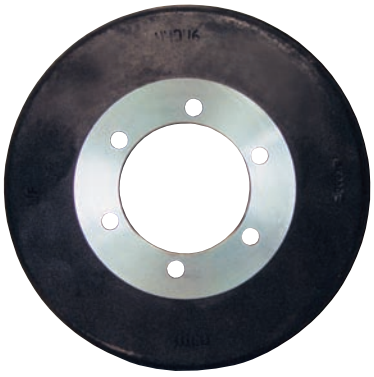
*Use with electric or hydraulic brakes

12" x 2" Hub and Drum with cups and bolts

Part No.	Bearings	No. of Bolts	Bolt Circle	Seal Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
1870000CB042		6	5.5		Cup & Bolt	38	36	STD
1870000042	1 1/4"x1 1/4"	6	5.5	2 1/4	w/18827 Dust Cup	40	36	STD
4221400CB042		6	5.5		Cup & Bolt	38	36	STD
422140000042		6	5.5	2 1/4	w/4159 Dust Cup	40	36	STD

12" x 2" Hub and Drum with cups and bolts

Part No.	Bearings	No. of Bolts	Bolt Circle	Seal Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
1870100CB042		8			Cup & Bolt	39	57	STD
1870100042	1 1/4"x1 1/4"	8	6.5	2 1/4	Complete	42	57	STD

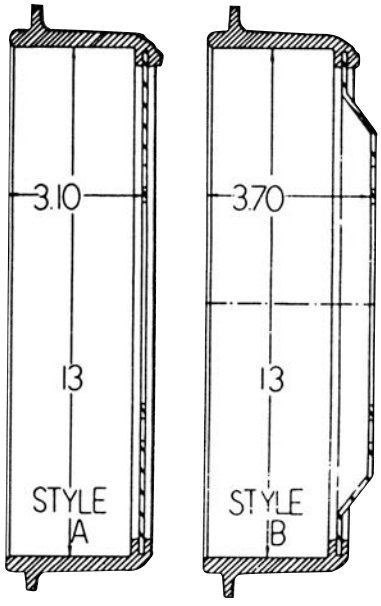


12” Brake Drum Assembly (Cast)

Part No.	No. of Bolts	Bolt Circle	Center Hole Size	Description	Weight (Pounds)	Pallet Quantity	Standard Non-Standard
4404700	6	5.5	4 3/8”	12 x 2	17	—	STD

Demountable 13” Brake Drums

Composite Cast Iron and Steel Stamping Construction



STYLE A

Style A Part No.	No. of Bolts	Bolt Circle	Bolt Hole Diameter	Center Hole Size	Weight (Pounds)	Standard Non-Standard
0989400	8	8”	5/8”	5 3/4”	21	STD
1696400	6	8 1/4”	17/32”	6”	21	STD

STYLE B

Style B Part No.	No. of Bolts	Bolt Circle	Bolt Hole Diameter	Center Hole Size	Weight (Pounds)	Standard Non-Standard
1011100	6	5 1/2”	17/32”	4 3/8”	21	STD
*1885900	8	5 1/2”	17/32”	4 3/8”	21	STD
*4326800	8	5 1/2”	17/32”	4 1/2”	21	STD

* with reinforcement plate

INTRODUCTION TO SURGE BRAKING

Surge braking is accomplished by replacing a trailer's standard tongue coupler with an actuator and adding hydraulic brake assemblies. The "surge" or "push" of the trailer toward the tow vehicle during deceleration automatically synchronizes these trailer brakes with the tow vehicle brakes. As the trailer pushes against the vehicle, the actuator telescopes together and applies force to its master cylinder, supplying hydraulic pressure to the trailer's brakes.

Surge actuators of this type provide a service life of approximately five years with proper installation, usage, and maintenance. However, a well-cared-for actuator can often exceed this estimate. To get the most benefit from your TITAN surge actuator, follow the instructions given in this manual and use common sense in caring for the TITAN brake actuator and your entire trailer brake system.

TITAN ACTUATOR RECOMMENDED APPLICATIONS

MODEL 60

-6,000 lb. Max. Gross Load, 600 lb. Max. Tongue Load

For recreational, boat, baggage, and other light occasional-use trailers, which are towed by passenger cars and pickups.

AERO-7500 ***RE-RATED!***

-7,500 lb. Max. Gross Load, 750 lb. Max. Tongue Load. Equipped with lock-out lever for backing up.

For recreational, boat, baggage, and other light occasional-use trailers, which are towed by passenger cars and pickups.

MODEL 6

-Multi-fit: 6,000 lb. Max. Gross Load, 600 lb. Max. Tongue Load

-2 5/16" Ball & 3" Lunette Eye: 7,500 lb. Max. Gross Load,
600 lb. Max. Tongue Load

For recreational trailers subject to more frequent use, light utility trailers, and light occasional-use industrial trailers, which are towed by passenger cars and pickups.

ULTRA-70

-7,000 lb. Max. Gross Load, 700 lb. Max. Tongue Load. Equipped with an integral back up solenoid valve.

- 2" Ball

For recreational, marine, and agricultural, occasional use trailers towed by cars or pickups.

MODEL 10

-10,000 lb. Max. Gross Load, 800 lb. Max. Tongue Load

For heavier recreational and light industrial trailers, which are towed by passenger cars and pickups.

MODEL 20

-Fixed Coupler: 20,000 lb. Max. Gross Load, 2,000 lb. Max. Tongue Load

-Adjustable Clevis Hitch: 20,000 lb. Max. Gross Load, 2,000 lb. Max. Tongue Load

-Adjustable 2 5/16" Ball & Adjustable 3" Lunette Eye: 12,000 lb. Max. Gross Load, 1,200 lb.
Max. Tongue Load

For heavy or frequent-use applications, and for trailers pulled by trucks larger than standard pickups. Typical uses include industrial equipment trailers, agricultural spreaders, tank trailers, and wagons, utility reel and pole trailers, and military ground support equipment.

BRAKE RITE

-For light to heavy duty utility, recreational, agricultural, and travel trailers towed by vehicles with the capacity to tow the gross vehicle weight rating for the trailer.

BrakeRite Electric/Hydraulic Actuator

Original BrakeRite EHB

A proven track record of performance and reliability! Designed to be hard wired into your trailers electrical system. All components self-contained under the BrakeRite's cover.

1500 PSI - BRAKERITE EHB

Part No.	Brake Type	Standard or Non-standard	Weight	Pallet Quantity
4813100	Disc	STD	10.5	24

1000 PSI - BRAKERITE EHB

Part No.	Brake Type	Standard or Non-standard	Weight	Pallet Quantity
4822500	Drum	STD	10.5	24

BrakeRite II

Designed for severe duty applications using external control modules for specific applications. Control modules have plug-in weather sealed connectors.

The **BrakeRite II** *is used with either the:*

BRAKERITE SD Severe Duty *or* BRAKERITE RF Radio Frequency / Rental Friendly

kits to match your specific trailoring application.

BRAKERITE II

Part No.	Brake Type	Standard or Non-standard	Weight	Pallet Quantity
4834100	Disc/Drum	STD	10.5	24

Titan has been a pioneer in the Electro Hydraulic Brake (EHB) actuator industry beginning in the early 90's.

In the new millennium Titan developed and tested the BrakeRite EHB that was introduced in early 2002.

The features of the **BrakeRite EHB** *and the* **BrakeRite II** *include:*

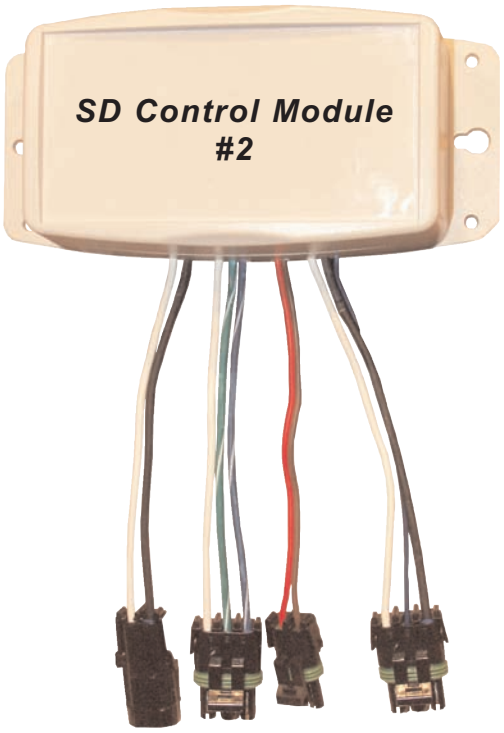
- *First in the field with an electronic proportional pressure valve*
- *The most rapid response from brake actuation to total dynamic braking in the industry*
- *Hybrid electronic control board compatible with most in-cab brake controllers*
- *On-going in plant performance testing and each production unit is bench tested*
- *Research and development is the "norm" at Titan*
- *Pump/motor based*
- *Isolated fluid reservoir with diaphram type valve filler cap*

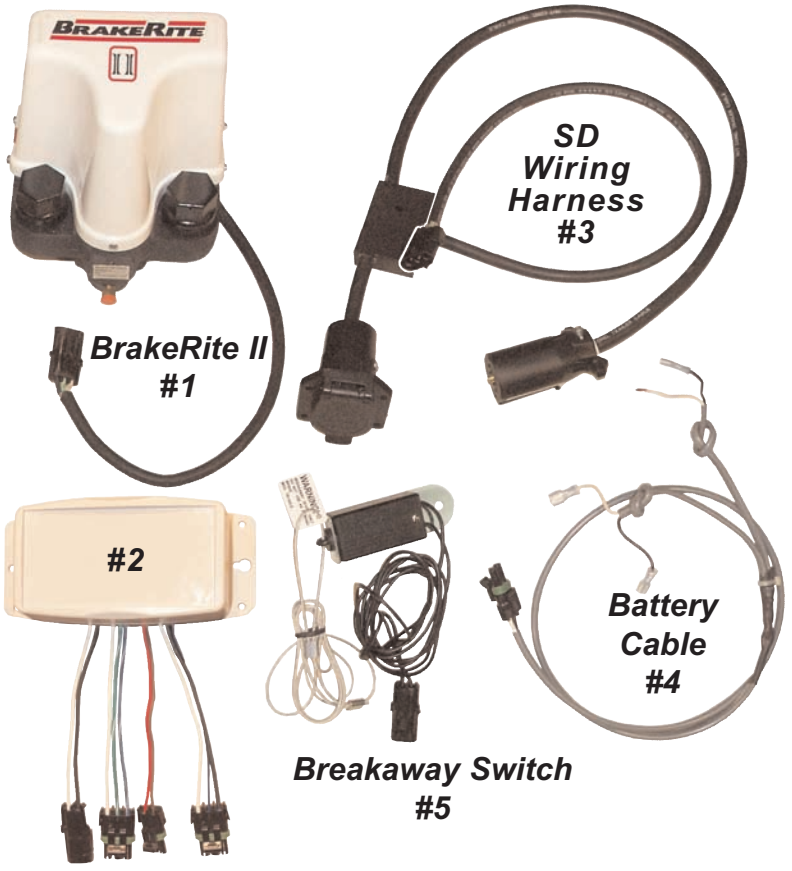
BrakeRite SD
Severe Duty

The **BrakeRite II - Severe Duty** *utilizes the proven technology and performance of the BrakeRite EHB however, the installation process has been simplified in the new model.*

The features of the **BrakeRite II - Severe Duty** *include:*

- *Utilizes the standard proven EHB electronic control board, potted and enclosed in a remote mounted control module*
- *Provides complete Plug-In wiring harnesses to simplify field installation*
- *In the event of field service, component replacement is simplified*
- *Potted hybrid circuitry provides dependable service under adverse conditions*





BRAKERITE II SD KIT (includes everything listed above)

Part No.	Brake Type	Standard or Non-standard	Weight	Pallet Quantity
4835700	Disc/Drum	STD	13	TBD

BRAKERITE II SD PARTS LIST

Ref #	Part Number	Part Description
1	4834100	BrakeRite II
2	4834200	SD Control Module
3	4834300	SD Wiring Harness
4	4834400	BrakeRite II Breakaway Battery Harness
5	4834500	BrakeRite II Breakaway Battery Switch

Custom made harness' are available upon request. Contact your sales representative for details.

BrakeRite RF

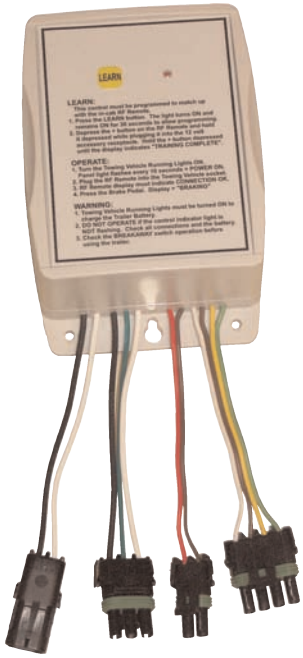
Radio Frequency / Rental Friendly

The **BrakeRite II - RF** *applies the outstanding BrakeRite EHB performance with radio frequency control to provide quality braking for trailers to be towed by vehicles without the standard, hard wired in-cab brake controllers*

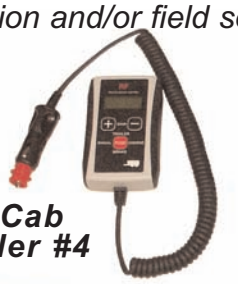
This system incorporates the latest in deceleration sensing by utilizing an accelerometer chip in the hybrid circuitry to apply the trailer brakes in proportion to the tow vehicle braking. The in-cab controller manual override is transmitted by RF (radio frequency) to the control module and is powered by the in-cab power outlet (cigarette lighter).

The features of the **BrakeRite II - RF** *include:*

- *Utilizes basic EHB electro-mechanical feature proven in field use*
- *Has potted hybrid circuitry which functions even in severe environmental conditions*
- *Plug-in technology provides for ease of installation and/or field service*



RF Control Module #2

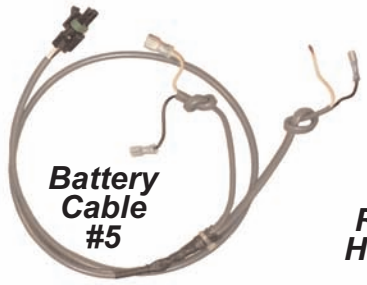


RF In-Cab Controller #4

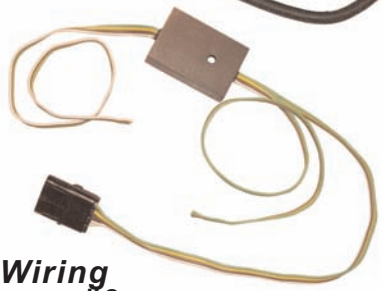
Breakaway Switch #6

#2

BrakeRite II #1



Battery Cable #5



RF Wiring Harness #3

BRAKERITE II RF KIT (includes everything listed above)

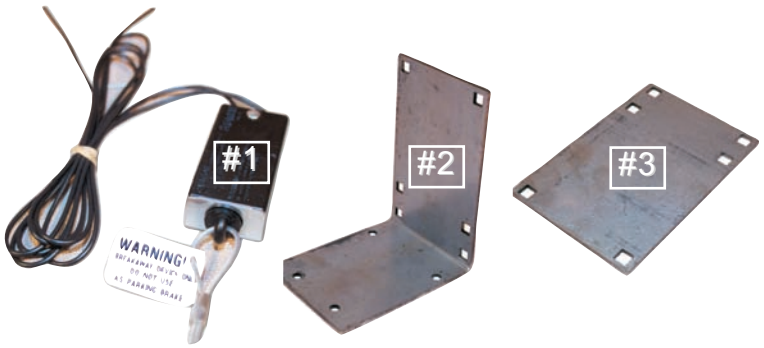
Part No.	Brake Type	Standard or Non-standard	Weight	Pallet Quantity
4835600	Disc/Drum	STD	13	TBD

Custom made harness' are available upon request. Contact your sales representative for details.

BRAKERITE II RF PARTS LIST

Ref #	Part Number	Part Description
1	4834100	BrakeRite II
2	4835100	RF Control Module
3	4835500	RF Wiring Harness
4	4835200	RF In-Cab Controller
5	4834400	BrakeRite II Breakaway Battery Harness
6	4834500	BrakeRite II Breakaway Battery Switch

BRAKE RITE ACCESSORIES



BRAKERITE EHB ACCESSORIES

Ref #	Part Number	Part Description
1	4822100	Gel Cell Breakaway Kit with 2 Batteries
2	4821800	Angle Mounting Bracket - unpainted
3	4821900	Mounting Plate - unpainted

!!! WARNING !!! Before using trailer always check:

1) Brake fluid level must be maintained between three eighths & three quarters of an inch of filler cap opening.
2) Prior to moving coupled units check unit to be certain system is functioning properly (consult owner's manual).
3) Prior to moving coupled units check BREAKAWAY PROTECTION. NEVER ATTEMPT TO MOVE/USE THE TRAILER if the Breakaway Battery is not fully charged.
4) DO NOT RELY ON Towed Vehicle Brakes for entire unit braking. The Towed Vehicle Brake is only to supplement the Braking System on the Towing Vehicle, NOT TO STOP THE ENTIRE UNIT.
5) ALWAYS operate unit within prudent parameters and obey all laws.

BrakeRite Limited Warranty:

Eligibility: You are eligible for the benefits of this limited warranty if you are the original end-use purchaser of this BrakeRite EHB and if the unit has been used only on the vehicle in which it was first installed.

What Is Covered: Titan Tire warrants this product to be free from defects in material and workmanship for 18 months after the date of manufacture or one year from the date of retail sale, whichever occurs first, when properly installed , used and maintained.

What Is Not Covered: The warranty does not apply to damage or loss caused by any of the following circumstances or conditions:

1. Freight damage
2. Misapplication, misuse, modification, or failure to follow the directions or observe cautions and warnings on installation, wiring, operation, application, inspection or maintenance specified in any Titan specification sheet, instruction and installation manual ;
3. Using parts, accessories or components not specified in Titan's specification sheet, instruction and installation manual or approved by Titan Distribution in writing.

Conditions and Limitations: Titan Tire's liability and purchaser's remedy are expressly limited, at Titan's sole option, to the repair or replacement of the defective product. For the warranty to apply, Titan Distribution must receive notice of the alleged defect within 30 days of i) the alleged defect or ii) the expiration of the warranty period, whichever is earlier. Any claim not made within this period shall conclusively be deemed void. Titan Distribution reserves the right to request that the product be returned to Titan Distribution, intact and postage prepaid, prior to processing a warranty claim.

Titan Distribution shall not be liable for loss of use of the unit, or any other incidental or consequential costs, expenses or damages incurred by the purchaser.

Some states do not allow the exclusion or limitation of implied warranties, incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

To Receive Benefits Under This Warranty: Contact Titan Tire at the address or phone number below to obtain an authorization for return.

Titan Tire Corporation
Attention Warranty Dept.
2345 E. Market Street
Des Moines, IA 50317
800-832-8781

The product must be returned, shipping costs prepaid, insured to the factory for evaluation.

The following information should be available when contacting the factory and must accompany the return, legibly prepared: i) name, address and telephone number of purchaser, ii) proof of purchase including date, iii) model and serial number of the unit, iv) name and address of the dealer where the unit was purchased, v) description of the alleged defect.

These terms and conditions represent the entire Titan Distribution BrakeRite EHB warranty, and no terms or conditions in any way adding to, modifying or otherwise altering the provisions stated herein shall bind Titan Distribution unless in writing signed by Titan Distribution.

ULTRA-70

ULTRA-70 SLIM LINE ACTUATOR

All Ultra-70's have a rated capacity of 7,000 G.V.W.R. 700 lbs. MAX. tongue load.

The Ultra-70 is a streamlined actuator designed with an outer case to be attached and painted with your trailer. The sleek inner cartridge is pleasing to the eye, but don't let looks deceive you, the Ultra-70 with it's cast ball latch and high strength steel case is the most rugged actuator in its weight class.

Ultra-70

- *7,000 lbs. capacity, 700 lb. tongue weight*
- *Sleek, streamlined features to integrate with trailer design*
- *Easily handles twin 3,500 lb. axles*
- *Can be used with disc or drum brakes (must specify type when ordering)*
- *Outer case designed to be attached and painted with trailer*
- *Bolt-on and weld-on versions available*
- *Available in plated, primed or unpainted finishes*
- *Equipped with an integral backup solenoid valve*

Ultra-70 Assy. - Weld-on (un-painted)

Part No.	Brake Type	Standard or Non-standard	Weight	Master Cyl.	Pallet Quantity
4816000	Disc	STD	22.5	4819200	30
4831000	Drum	STD	22.5	4830900	30

Ultra-70 Assy. - Bolt-on (plated)

Part No.	Brake Type	Standard or Non-standard	Weight	Master Cyl.	Pallet Quantity
4823200	Disc	STD	22.5	4819200	30
4831100	Drum	STD	22.5	4830900	30

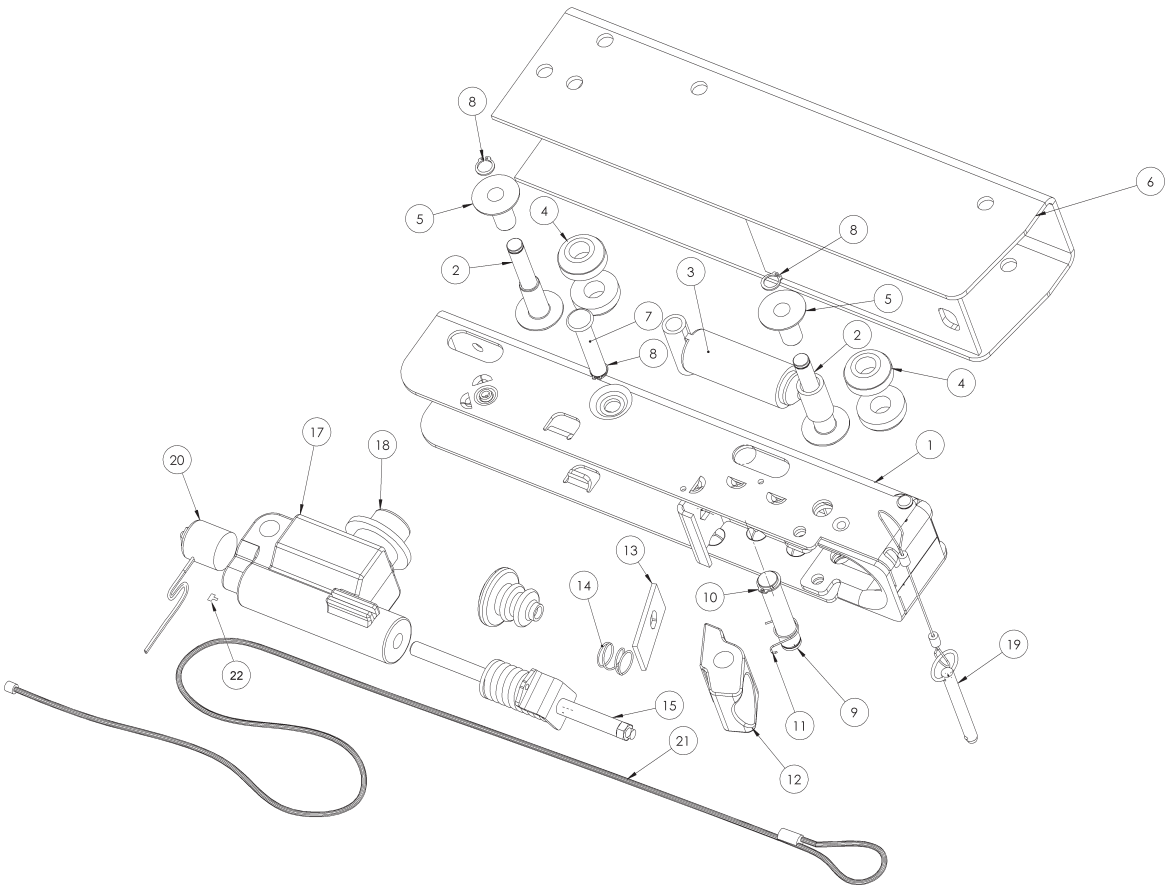
Ultra-70 Assy. Bolt-on (primed)

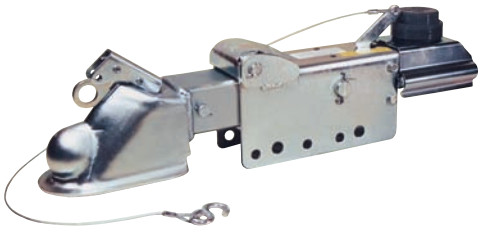
Part No.	Brake Type	Standard or Non-standard	Weight	Master Cyl.	Pallet Quantity
4823300	Disc	STD	22.5	4819200	30
4831200	Drum	STD	22.5	4830900	30

ULTRA-70 Parts List

Item Number	Quantity	Part Number	Description
1	1	4816200	Inner assembly
2	2	4811300	Pin
3	1	4819100	Damper
4	4	4818500	Roller
5	4	4818700	Sleeve, roller
6	1	4819600	Outer case, weld-on uncoated version
	1	4823400183	Outer case, bolt-on plated version
	1	4823400317	Outer case, bolt-on painted version
7	1	4818400	Damper pin
8	3	4511100	Retaining ring 1/2" dia.
9	1	4818300	Ball latch pivot pin
10	2	4850700	Retaining ring 5/8" dia.
11	1	4820200	Ball latch spring
12	1	4818200	Ball latch
13	1	4818600	Break away lock lever
14	1	4818800	Break away lock spring
16		4832100	Complete inner assembly, disc brake
		4832200	Complete inner assembly, drum brake
17	1	4819200	Master cylinder, disc brake
	1	4830900	Master cylinder, drum brake
18	1	4830600	Filler cap, master cylinder, diaphram
	1	4813700	Filler cap, master cylinder, vented
19	1	4819400	Safety lock pin with lanyard
20	1	4819300	Back-up valve
21	1	4822300	Breakaway cable
22	1	4750300	Orifice connector, disc brake
	1	1209800	Orifice connector, drum brake

Pushrod Assy.	1	4818900	Push rod
15	1	4822200	Cable bracket
	1	2338600	Spring
	1	2338500	Washer





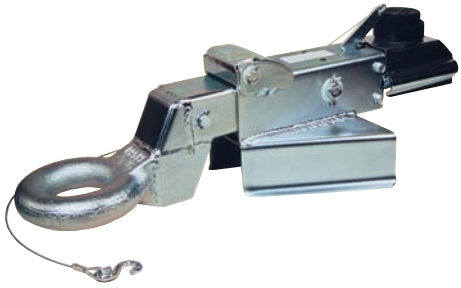
Model 6 Actuator with 2 5/16" Ball Coupler

7,500 pound capacity, Max. G.V.W.R., 600 pound tongue load, G.V.W.R. limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
	4079200	Drum	STD	35	22	10271	1777401	1848700	2 5/16 CPLR Bolt-On
	4747200	Disc	STD	35	22	47470	1777405	1848700	2 5/16 CPLR Bolt-On
4079200317		Drum	*NON-STD	35	22	10271	1777401	1848700	2 5/16 CPLR Bolt-On
4747200317		Disc	*NON-STD	35	22	47470	1777405	1848700	2 5/16 CPLR Bolt-On

NOTE: For 3" wide trailer tongue.

*Non-Standard Actuators require minimum 8-week lead time and minimum order quantity may be required.



Model 6 A-Frame (50°) Actuator w/Lunette Eye

7,500 pound capacity, Max. G.V.W.R., 600 pound tongue load.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
	4045500	Drum	*NON-STD	41	14	10271	1777401		L-Eye Weld-On

NOTE: Disc Brake version is available upon request.

*Non-Standard Actuators require minimum 8-week lead time and minimum order quantity may be required.

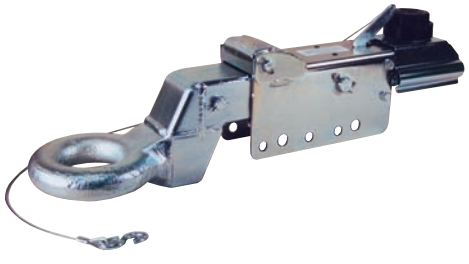
Model 6 A-Frame (50°) Actuator with 2 5/16" Ball Coupler

7,500 pound capacity, Max. G.V.W.R., 600 pound tongue load
G.V.W.R. limited to ball rating

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
	4067600	Drum	*NON-STD	38	14	10271	1777401		2 5/16 CPLR Weld-On

NOTE: Disc Brake version is available upon request.

*Non-Standard Actuators require minimum 8-week lead time and minimum order quantity may be required.

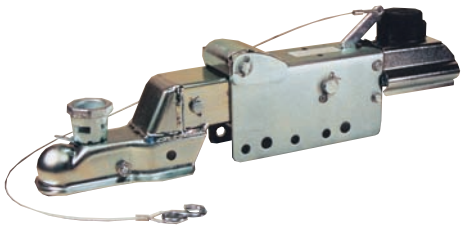


Model 6 Straight Actuator with Lunette Eye

7,500 pound capacity, Max. G.V.W.R., 600 pound tongue load

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
	4093200	Drum	*NON-STD	38	20	10271	1777401		L-Eye Bolt-On
	4748000	Disc	*NON-STD	38	20	47470	1777405		L-Eye Bolt-On

NOTE: For 3" wide trailer tongue.
NOTE: Padlock (Master Lock #30) works with a 2 5/16" Ball Coupler.
*Non-Standard Actuators require minimum 8-week lead time and minimum order quantity may be required.



Model 6 Actuator with Multi-fit Ball Coupler

6,000 pound capacity, Max. G.V.W.R., 600 pound tongue load
G.V.W.R. limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
	2480000	Drum	STD	28	22	10271	1777401	40454	CPLR Bolt-On
	4747900	Disc	STD	28	22	47470	1777405	40454	CPLR Bolt-On

NOTE: Fits 1 5/16", 50mm and 2" ball.
For 3" wide trailer tongue.

Model 6 A-Frame (50°) Actuator with Multi-fit Ball Coupler

6,000 pound capacity, Max. G.V.W.R., 600 pound tongue load
G.V.W.R. limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
	2492800	Drum	STD	31	14	10271	1777401	40454	CPLR Bolt-On

NOTE: Fits 1 5/16", 50mm and 2" ball.
NOTE: Disc Brake version is available upon request.

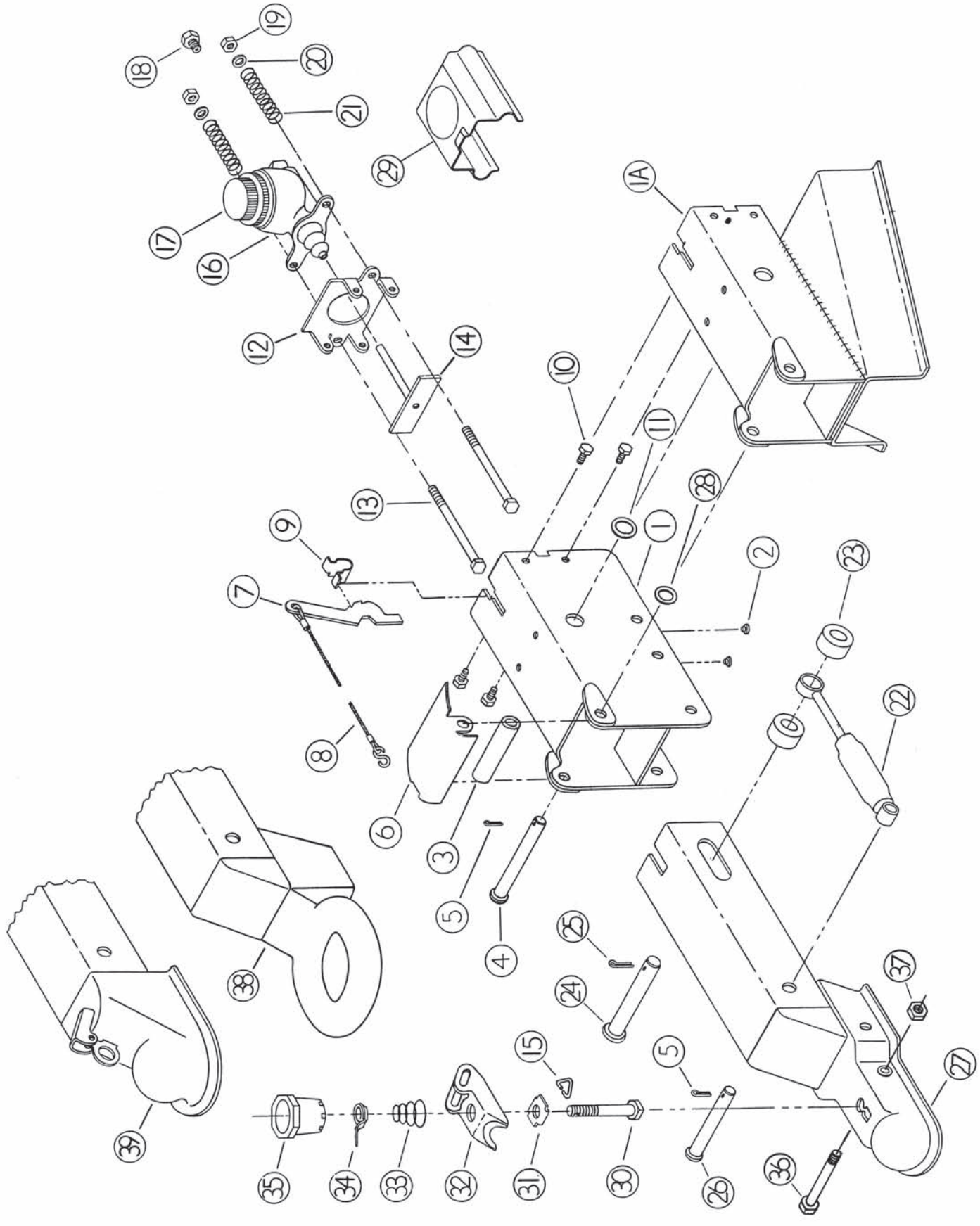
Model 6 Actuator with Leveler Channel

7,500 pound capacity, Max. G.V.W.R., 600 pound tongue load
G.V.W.R. limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
	4744901	Drum	*NON-STD	28		10271	1777401	40454	CPLR Bolt-On

NOTE: Disc Brake version is available upon request.
*Non-Standard Actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 6 ACTUATOR PARTS DIAGRAM



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MODEL 6 ACTUATOR PARTS LIST

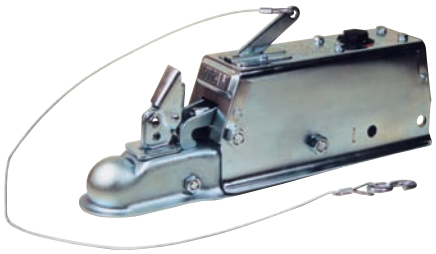
(REFER TO DIAGRAM ON PAGE 23)

	Key No.	Part No.	Description	Qty Reqd.
	1	2480100183	Outer Case Assy	1
	1A	2493000	Outer Case Assy	1
	2	1242700	Bearing	2
	3	1776300	Front Roller	1
	4	1776600	Front Roller Pin	1
	5	0799700	Cotter Pin 1/8 x 3/4	2
	6	1776700	Front Roller Cover #6000	1
	6	4350700183	Front Roller Cover #7500	1
	7	4594100	Breakaway Lever w/Pin	1
	8	1055500	S-Hook - Part of 4594100	1
	9	1780300	Breakaway Spring	1
	10	1781500	Hex Bolt 5/16 x 1/2 Self Tapping	4
	11	1861900	Washer	1
x	12	1776200	Cylinder Mounting Plate	1
x	13	1027300	Hex Bolt 3/8 NC x 5	2
x	14	4390500	Push Rod Assy	1
	15	* 2496400	Lock-Ring	1
x	16	1027100	Master Cylinder - Drum Brake	1
x	16	4747000	Master Cylinder - Disc Brake	1
x	17	1755600	Master Cylinder Cap w/gasket	1
	18	1209800	Connector - 1/64 Orifice - Drum Brake	1
		4750300	Connector - Disc Brake	1
x	19	0797600	Nut - Hex 3/8 NC	2
x	20	0782000	Washer 3/8	2
x	21	1027400	Spring	2
	22	1242600	Damper	1
	23	0829100	Rear Roller	2
	24	1777300	Master Pin	1
	25	0815200	Cotter Pin	1
	26	1777200	Damper Pin	1
	27	4391600	Inner Slide Assy w/ Bolt, Locknut, and Ball Latch	1
	28	1831600	Washer	1
	29	1806600183	Cover	1
	30	* 2338100	Latch Bolt	1
	31	* 1809000	Lock Plate	1
	32	* 4335800	Ball Latch	1
	33	* 4336800	Compression Spring	1
	34	* 2338300	Hand Wheel Lock	1
	35	* 2420000	Hand Wheel	1
	36	* 2339000	Bolt - Hex 7/16 NF 2-5/8	1
	37	* 2339100	Locknut - Hex 7/16 NF Thin	1
	38	4045600	Inner Slide w/3" Lunette Eye	1
	39	4067700183	Inner Slide w/2-5/16" Ball Coupler	1
		1502600	Master Cylinder Repair Kit Wagner	1
		4045400	Multi-Fit Coupler Repair Kit (bolt & locknut, replace riveted pin)	1
		1848700	2-5/16" Ball Coupler Repair Kit	1
		4808000	Backup Valve Kit	1

x These parts are included in the master cylinder assembly # 1777401 & 1777405

* These parts are included in the 4045400 Coupler Repair Kit

Model 60 Leverlock Actuator

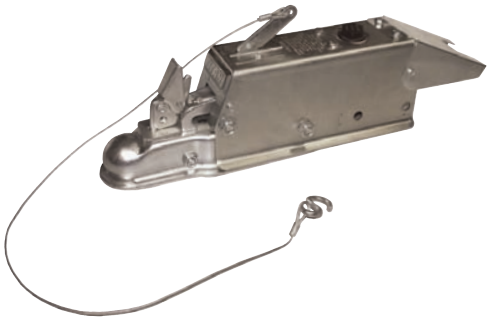


6,000 pound capacity, Max. G.V.W.R., 600 pound tongue load
G.V.W.R. limited to ball rating.

Part No. Primed Non-Standard	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy. Kits	CPLR Repair Kit	Description
4338600	4332900	Drum	STD	20	36	23361	43951	43584	3" Tongue
4819900	4715400	Disc	STD	20	36	47142	4820000	43584	3" Tongue

NOTE: For 3" wide trailer tongue.
NOTE: Fits 1⅞", 50mm and 2" Ball. (some adjustment required)
NOTE: PRIMED PARTS ARE NON-STANDARD

Model 60 Leverlock Actuator w/ Solenoid Cover

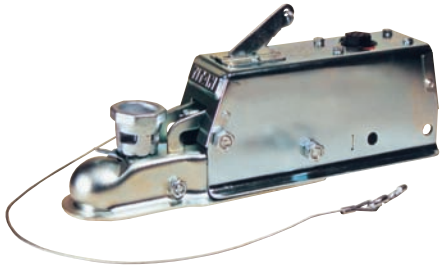


6,000 pound capacity, Max. G.V.W.R., 600 pound tongue load
G.V.W.R. limited to ball rating.

Part No. Primed Non-Standard	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy. Kits	CPLR Repair Kit	Description
4338610	4332910	Drum	STD	20	30	23361	43951	43584	3" Tongue
4819910	4715410	Disc	STD	20	30	47142	4820000	43584	3" Tongue

NOTE: For 3" wide trailer tongue.
NOTE: Fits 1⅞", 50mm and 2" Ball. (some adjustment required)
NOTE: PRIMED PARTS ARE NON-STANDARD

Model 60 Multi-fit Actuator

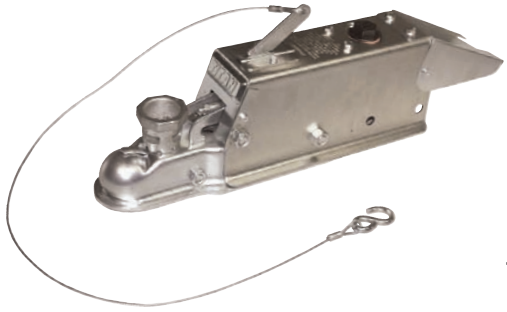


6,000 pound capacity, Max. G.V.W.R., 600 pound tongue load
G.V.W.R. limited to ball rating.

Part No. Primed Non-Standard	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy. Kits	CPLR Repair Kit	Description
4339900	4339700	Drum	STD	20	36	23361	43951	40454	3" Tongue
4815200	4745700	Disc	STD	20	36	47142	4820000	40454	3" Tongue

NOTE: For 3" wide trailer tongue.
NOTE: Fits 1⅞", 50mm and 2" Ball.
NOTE: PRIMED PARTS ARE NON-STANDARD

Model 60 Multi-fit Actuator w/ Solenoid Cover



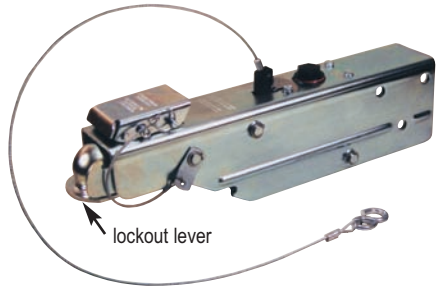
6,000 pound capacity, Max. G.V.W.R., 600 pound tongue load
G.V.W.R. limited to ball rating.

Part No. Primed Non-Standard	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy. Kits	CPLR Repair Kit	Description
4339910	4339710	Drum	STD	20	30	23361	43951	40454	3" Tongue
4815210	4745710	Disc	STD	20	30	47142	4820000	40454	3" Tongue

NOTE: For 3" wide trailer tongue.
NOTE: Fits 1⅞", 50mm and 2" Ball.
NOTE: PRIMED PARTS ARE NON-STANDARD

RE-RATED!

Aero 7500 Actuator with Lockout Lever

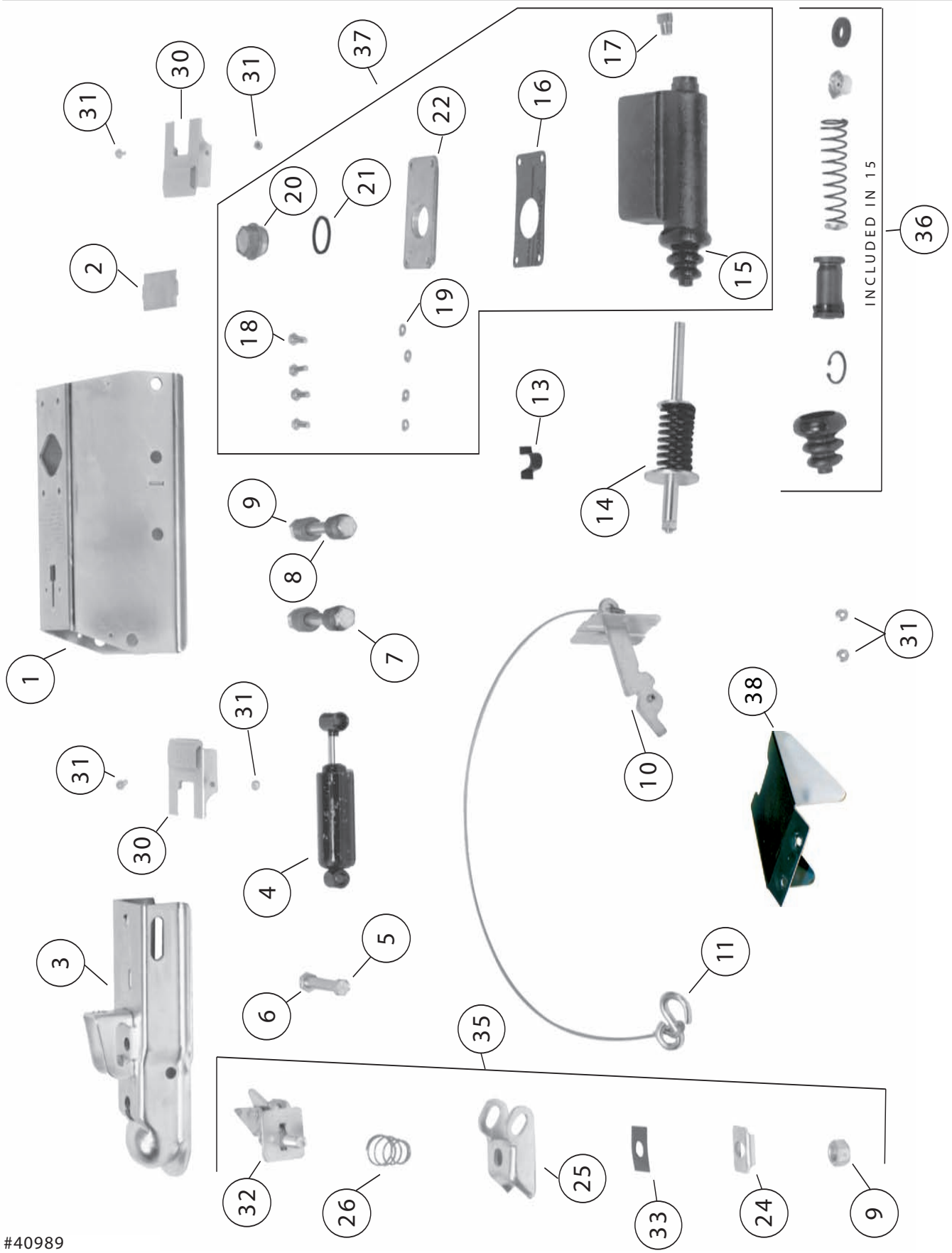


7,500 pound capacity, Max. G.V.W.R., 750 pound tongue load.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy. Kits	CPLR Repair Kit	Description
	4500600	Drum	STD	24	36	23361	43951		3" Tongue
	4606500	Disc	STD	24	36	47142	4820000		3" Tongue

NOTE: Use only with 2" diameter tow ball.
G.V.W.R. limited to that of the ball & hitch being used.

LEVER-LOCK
MODEL 60 ACTUATOR DIAGRAM



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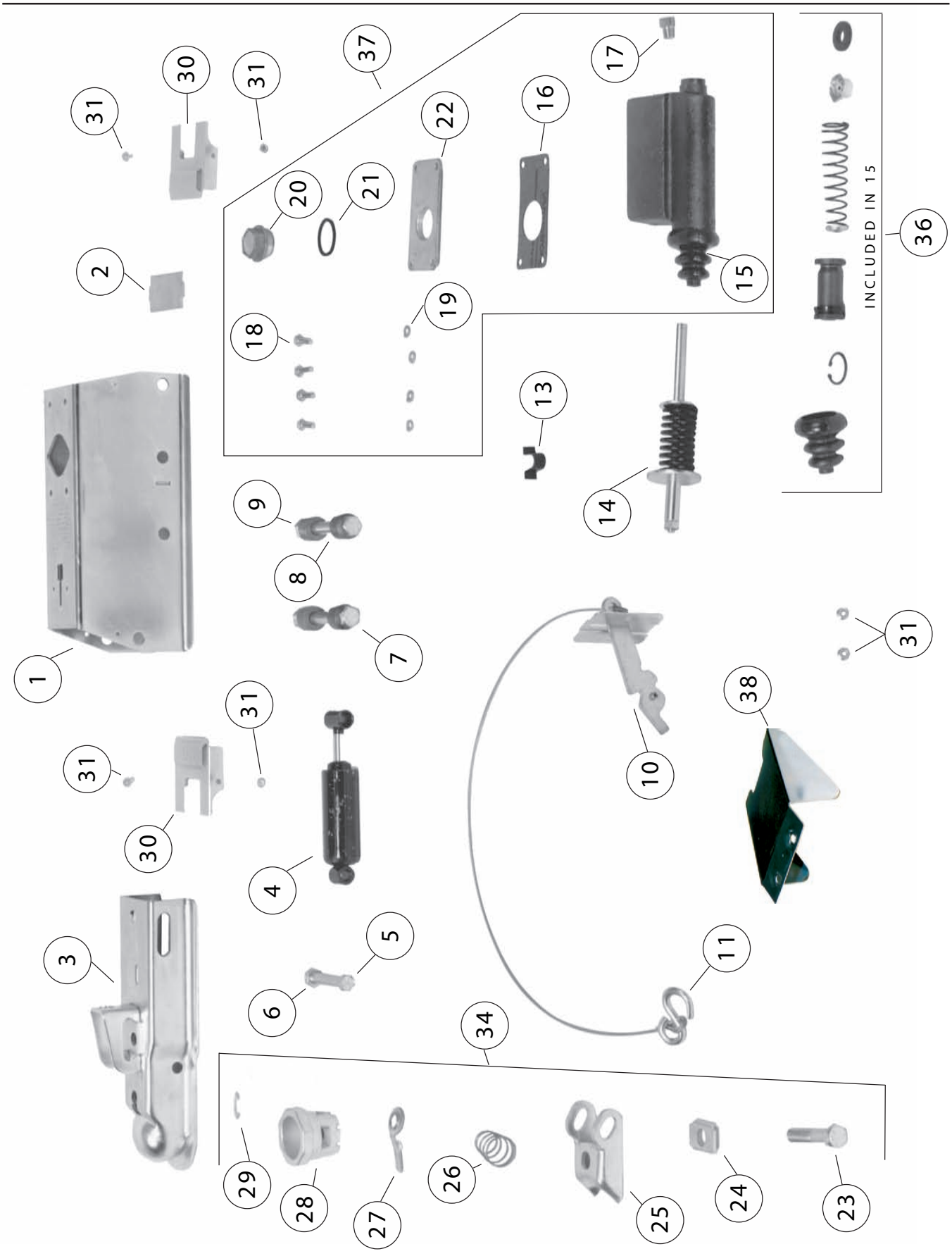
MULTI-FIT
MODEL 60 ACTUATOR DIAGRAM



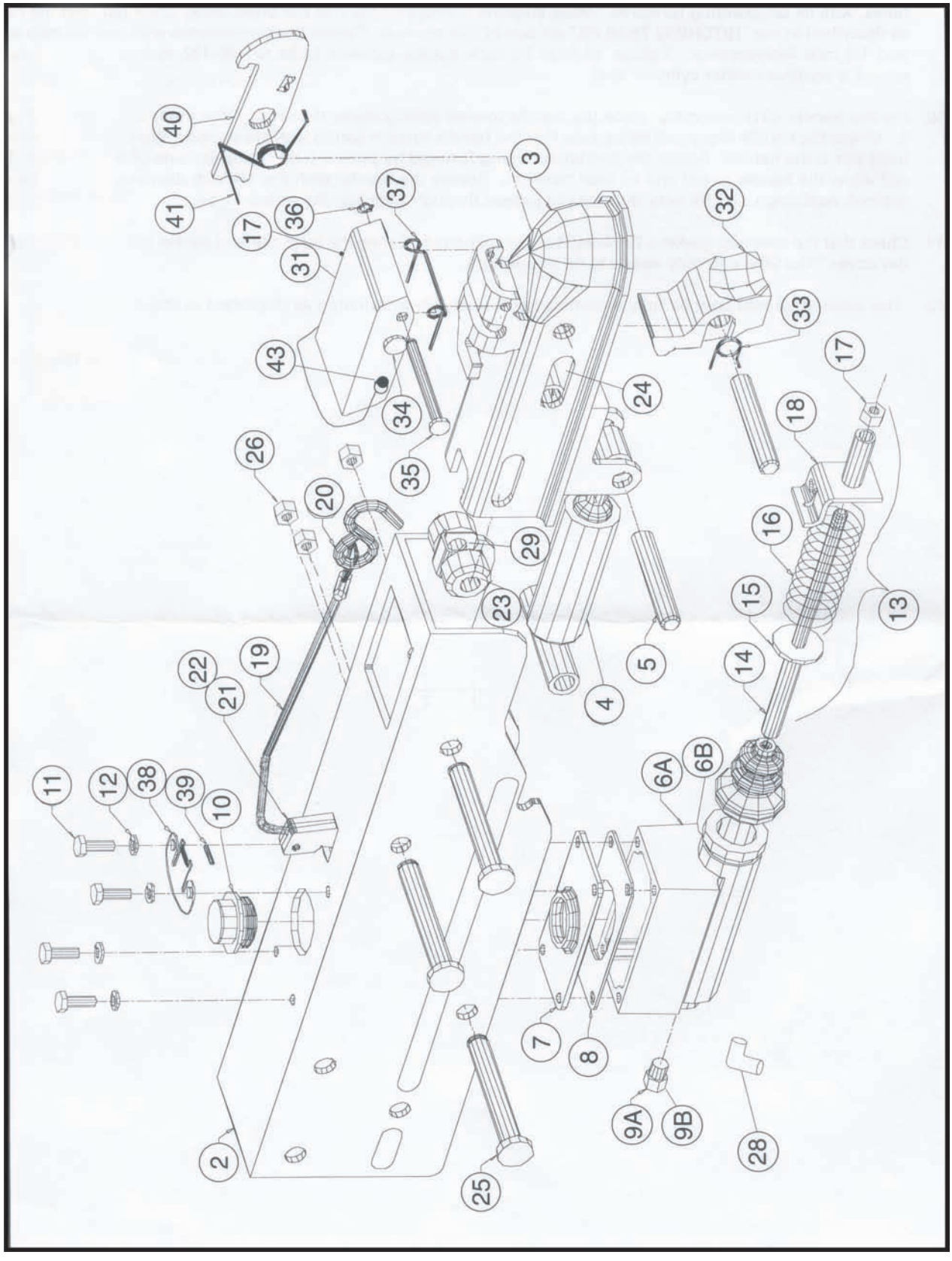
MODEL 60 ACTUATOR PARTS LIST
(REFER TO DIAGRAMS ON PAGE 26 & 27)

Ref No.	Part No.	Description	Multi-Fit Marine 43397, 47457	Multi-Fit Painted 43399, 48152	Lever-Lock Marine 43329, 47154	Lever-Lock Painted 43386, 48199
1	4324600	Outer Case	1		1	
1	4338700	Outer Case		1		1
2	2337700	Strut	1	1	1	1
3	2337800	Coupler Case	1			
3	4097000	Coupler Case		1		
3	4332500	Coupler Case			1	
3	4338800	Coupler Case				1
4	2336200	Damper	1	1	1	1
5	2339000	Bolt, Hex 7/16 NF x 2-5/8	1	1	1	1
6	2339100	Locknut, Hex 7/16 NF Thin	1	1	1	1
7	2327800	Roller	4	4	4	4
8	2341300	Bolt, Hex 1/2 NF x 3-3/4	2	2	2	2
9	1861200	Locknut, Hex 1/2 NF	2	2	3	3
10	4623800	Breakaway Assy. w/pin, cover, s-hook	1	1	1	1
11	1055500	S-hook - included with 46238	1	1	1	1
13	4005200	Breakaway Spring	1	1	1	1
14	2346300	Push Rod Assembly	1	1	1	1
15	* 2336100042	Master Cylinder - Drum Brake	1	1	1	1
15	* 4714200042	Master Cylinder - Disc Brake	1	1	1	1
16	* 2341400	Gasket	1	1	1	1
17	* 1209800	Connecor, 1/64" orifice - Drum Brake	1	1	1	1
17	* 4750300	Connector - Disc Brake	1	1	1	1
18	* 1050800	Bolt, Hex 1/4 NC x 3/4	4	4	4	4
19	* 0794000	Lockwasher 1/4	4	4	4	4
20	* 4480701	Filler ap, 1-1/4-18 NEF plastic	1	1	1	1
21	* 2338900	Gasket, Filler Cap	1	1	1	1
22	* 2356600	Cover, Master Cylinder	1	1	1	1
23	2338100	Latch Bolt	1	1		
24	1809000	Lock Plate	1	1	1	1
25	4335800	Ball Latch	1	1	1	1
26	4336800	Spring	1	1	1	1
27	2338300	Hand Wheel Lock	1	1		
28	2420000	Hand Wheel	1	1		
29	2496400	Lock Ring	1	1		
30	2452500183	Cover, Front	2		2	
30	2452500317	Cover, Front		2		2
31	1094100	Screw, Cover	6	6	6	6
32	4358500	Handle Assembly			1	1
33	4334500	Spring Plate			1	1
34	4045400	Multi-Fit Coupler Repair Kit	1	1		
35	4358400	Lever-Lock Coupler Repair Kit			1	1
36	1502600	Master Cylinder Repair Kit Wagner	1	1	1	1
37	4395100	Master Cylinder Kit (includes * parts) Drum Brakes	1	1	1	1
37	4820000	Master Cylinder Kit (includes * parts) Disc Brakes	1	1	1	1
38	4835800183	Solenoid Valve Cover, plated	1		1	
38	4835800	Solenoid Valve Cover, painted		1		1
	4748800	Solenoid Valve				

RECOMMENDED TOOLS

Socket and wrench sets Nut Drivers Torque wrench	Snap ring pliers Flat-blade screw driver

AERO 7500 ACTUATOR ASSEMBLY DIAGRAM

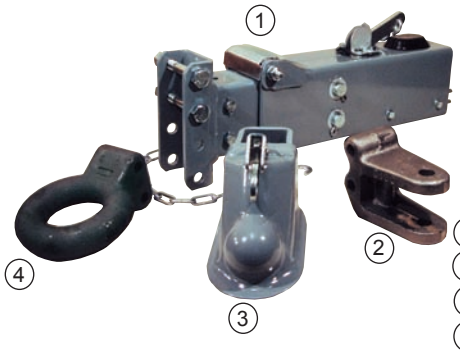


AERO 7500 ACTUATOR PARTS LIST
(REFER TO DIAGRAMS ON PAGE 29)

Ref No.	Part No.	Description	Drum Brake 4500600	Disc Brake 4606500
2	4500700	Outer Case, plated	1	1
3	4518100183	Coupler Case Assembly, plated	1	1
4	4502000	Damper	1	1
5	4511400	1/2" Damper Pin/Ball Latch Pin	2	2
6A	2336100042	Master Cylinder, **drum brake**	1	
6B	4714200042	Master Cylinder, **disc brake**		1
7	4518200	Cover, Master Cylinder	1	1
8	4524400	Gasket, Master Cylinder	1	1
9A	1209800	Orifice Connector, .015" diameter	1	
9B	4750300	Connector, .125" diameter		1
10	4480701	Filler Cap with gasket	1	1
11	4624200	Bolt, 1/4 - 20 X .875	4	4
12	794000	Lockwasher, 1/4" standard	4	4
13	4502700	Push Rod & Breakaway Cable Assy.	1	1
14	2338400	Push Rod	1	1
15	2338500	Washer, push rod	1	1
16	2338600	Spring, overload	1	1
17	1740600	Lock Nut, 5/16" - 18 NC	2	2
18	4518300	Spring Guide	1	1
19	4501300	Breakaway Cable	1	1
20	1055500	S - Hook	1	1
21	4597100	Breakaway Lever	1	1
22	4599500	Roll Pin, 3/16 X 1/2	1	1
23	4518400	Rear roller, sintered iron	2	2-
24	4518500	Front Roller	1	1
25	2341300	Bolt, 1/2" NF x 3 3/4 Hex head	3	3
26	4835400	1/2" NF locknut, half height	3	3
28	4809000	Elbow, 90 degree, 1/8 NPT, optional	1	1
29	4524900	Roller Separator	1	1
31	4501100	Handle	1	1
32	4500900	Ball Latch, cast	1	1
33	4520000	Spring, ball latch	1	1
34	4811500	Bolt, 5/16 - 18 NC X 3	1	1
35	4518600	Groove Pin, 1/4"	1	1
36	4518700	Retaining Ring, 1/4"	1	1
37	4521500	Spring, handle	1	1
38	4501400	Spring, breakaway catch	1	1
39	4597200	Pin, breakaway catch	1	1
40	4600100183	Lockout Lever	1	1
41	4600000	Lockout Spring	1	1
42	4745500	Label, disc brake actuator		1
43	4706400	Quick Release Pin & Lanyard	1	1
44	1502600	Master Cylinder Repair Kit		NA
45	4748800	Backup Valve		

Recommended Tools:
7/16” wrench
Snap Ring Pliers
Torque wrench
Locking pliers

Basic capacity 10,000 lbs. G.V.W.R., 800 lbs. tongue load
The Model 10 is demountable when installed with mounting channel for 3" width tongue or may be welded for permanent installation. This actuator is available with ball couplers, 3" lunette eye, and adjustable clevis hitch. Usage suggested for recreational and light industrial trailers towed by passenger cars and light trucks. ZINC PLATED (MARINE) MODELS AVAILABLE FOR GREATER CORROSION RESISTANCE.

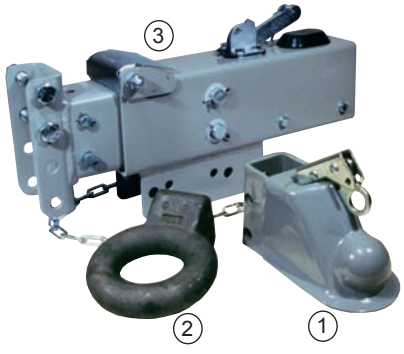


Model 10 Actuator with Leveler Channel

10,000 pound capacity

	Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1	2404600		Drum	STD	45	15	23744	2374600		Leveler Channel Only
2	1607900		Drum	STD	54	15	23744	2374600		8979 Clevis Hitch
3	1890900		Drum	STD	57	15	23744	2374600	18487	18820 2 5/16 CPLR
4	1891100		Drum	STD	57	15	23744	2374600		16137 Lunette Eye

Disc Brake version available upon request



Model 10 Actuator with Leveler Channel and Mounting Channel For 3" Width Tongue

10,000 pound capacity

	Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1	4238300		Drum	*NON-STD	60	15	23744	2374600	18487	2 5/16 CPLR
2	4238500	4809800	Drum	*NON-STD	61	15	23744	2374600		With Lunette Eye
3	2324800	4809700	Drum	*NON-STD	49	15	23744	2374600		Leveler
3		4809900	Disc	*NON-STD	49	15	47471	4749501042		Act w/Leveler
2		4810000	Disc	*NON-STD	61	15	47471	4749501042		With Lunette Eye

*Non-Standard actuators require minimum 8-week lead time and minimum quantity may be required

Model 10 Actuator with 2 5/16" Drop Coupler Less Channel

10,000 pound capacity

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1735200		Drum	STD	53	15	23744	2374600	18487	2 5/16 CPLR Weld-On

Disc Brake version available upon request

Model 10 Actuator - Straight 2 5/16" Ball Coupler Less Channel

10,000 pound capacity

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1607500		Drum	STD	50	18	23744	2374600	18487	2 5/16 CPLR Weld-On
4749600		Disc	STD	50	18	47471	4749501042		2 5/16 CPLR Weld-On

Model 10 Actuator - Straight with Lunette Eye Less Channel

10,000 pound capacity

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1607700		Drum	**NON-STD	54	18	23744	2374600		L-Eye Weld-On
*1664500		Drum	**NON-STD	58	15	23744	2374600		L-Eye Bolt-On

*With mounting channel for 3" width tongue.

**Non-Standard actuators require minimum 8-week lead time and minimum quantity may be required

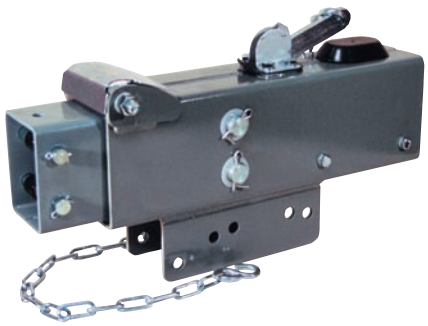
Disc Brake version available upon request

Model 10 Actuator less Coupler and Channel

10,000 pound capacity

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1608000		Drum	STD	41	30	23744	2374600		Weld-On

Disc Brake version available upon request



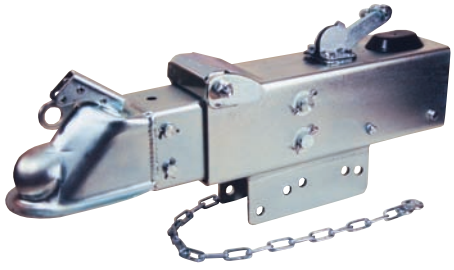
Model 10 Actuator - Straight less Coupler, with Mounting Channel for 3" Width Tongue

10,000 pound capacity

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1664900		Drum	*NON-STD	45	15	23744	2374600		Bolt-On

*Non-Standard actuators require minimum 8-week lead time and minimum quantity may be required

Model 10 Actuator - Straight with 2 5/16" Ball Coupler and Mounting Channel for 3" Width Tongue

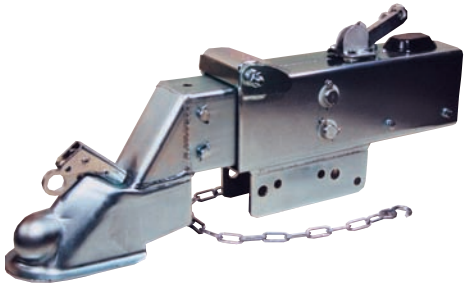


10,000 pound capacity

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
	2477600	Drum	STD	54	15	23744	2374600	18487	2 5/16 CPLR Bolt-On
1664300		Drum	*NON-STD	54	15	23744	2374600	18487	2 5/16 CPLR Bolt-On
	4750800	Disc	STD	54	15	47471	4749501042	18487	2 5/16 CPLR Bolt-On

*Non-Standard Actuators require minimum 8-week lead time and minimum order quantity may be required.

Model 10 Actuator - 2 5/16" Ball Drop Coupler and Mounting Channel for 3" Width Tongue



10,000 pound capacity

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
	2478100	Drum	STD	57	15	23744	2374600	18487	2 5/16 CPLR Bolt-On
	4750600	Disc	STD	57	15	47471	4749501042	18487	2 5/16 CPLR Bolt-On
1772700		Drum	STD	56	15	23744	2374600	18487	2 5/16 CPLR Bolt-On

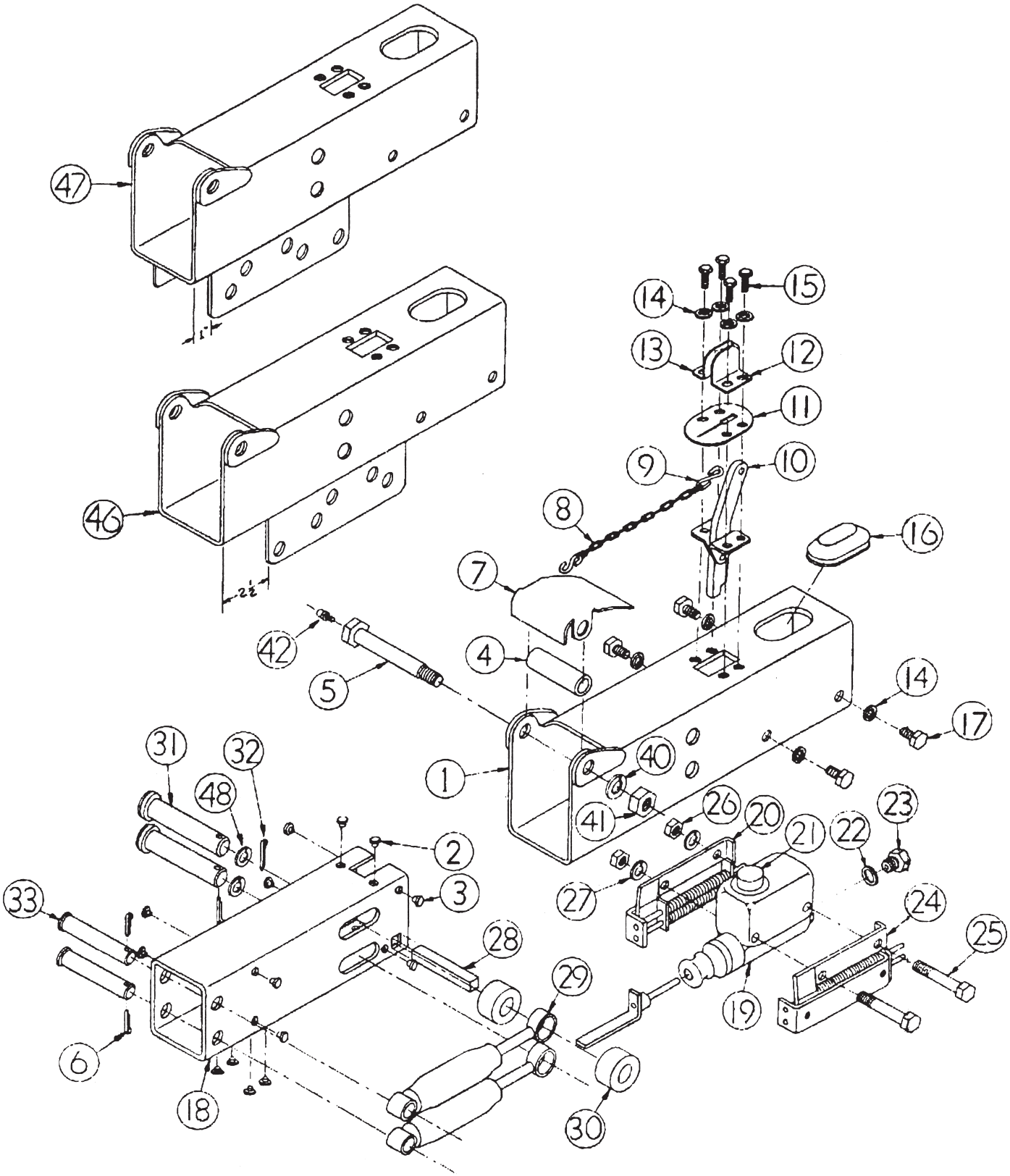
*Use 5/8" Mounting Bolt.

NOTE: Padlock (Master Lock #30) works with a 2 5/16" Ball Coupler.

Model 10 Actuator Product List

Part # Drum	Part # Disc	Description	Attachment	Inner	Outer
1608000		No coupler, painted	Weld-on	1593300	1601600
2404600		W/leveler channel, painted	Weld-on	1608700317	1601600
4809700	4809900	W/leveler channel, plated	Bolt-on 5/8"	4721700	2478200
4721600		W/leveler channel, plated	Bolt-on 1/2"	4721700	2477700183
1607500	4749600	2 5/16" coupler, straight, painted	Weld-on	1608400317	1601600
1664300		2 5/16" coupler, 2.5" offset, painted	Bolt-on 1/2"	1648400317	2477700317
2477600	4750800	2 5/16" coupler, 2.5" offset, plated	Bolt-on 1/2"	1608400183	2477700183
1735200	4830300	2 5/16" drop coupler, painted	Weld-on	2478300317	1601600
1772700	4830100	2 5/16" drop, 1" offset mtg channel	Bolt-on 5/8"	2478300317	1685500
2478100	4750600	2 5/16" drop coupler, plated	Bolt-on 5/8"	2478300183	2478200
1890900		2 5/16" adj. coupler, painted	Weld-on	1608700317	1601600
4238300		2 5/16" adj. coupler, 1" ofset channel	Bolt-on 5/8"	1608700317	1685500
1891100		3" adjustable lunette eye, painted	Weld-on	1608700317	1601600
1607900		Adjustable clevis hitch, painted	Weld-on	1608700317	1601600
1607700		3" lunette eye, painted	Weld-on	1608600	1601600
1664900		No coupler, 2.5" offset mtg. channel	Bolt-on 1/2"	1593300	2477700317
1664500		3" lunette eye, 2.5" offset mtg. channel	Bolt-on 1/2"	1608600	2477700317
4238500		W/leveler channel, 1" ofset mtg. channel	Bolt-on 5/8"	1608700317	1685500
4299600		2 5/16" drop, 2.5" offset mtg. channel	Bolt-on 1/2"	2478300183	2477700183
2324800		W/leveler channel, 2.5" mtg. channel	Bolt-on 1/2"	1608700317	2477700317

MODEL 10 ACTUATOR PARTS LIST



MODEL 10 ACTUATOR PARTS LIST
(REFER TO DIAGRAM ON PAGE 34)

Ref No.	Part No.	Description	Qty Reqd.
1	1601600	Outer case, painted	1
47	2478200	Outer case, 1" offset mtg channel, plated	1
47	1685500	Outer case, 1" offset mtg channel, painted	1
48	2477700183	Outer case, 2.5" offset mtg channel, plated	1
48	2477700317	Outer case, 2.5" offset mtg channel, painted	1
2	1020900	Bearing (top and bottom), 0.125" thick	6
3	1242700	Bearing (side), 0.075" thick	8
4	1601900	Front roller	1
5	828800	Front roller bolt	1
6	799700	Cotter pin 1/8 x 1	2
7	1601800	Front roller cover	1
8	776800	Breakaway chain	1
9	1055500	S-hook	2
10	1054100	Breakaway lever assembly	1
11	1055200	Weather seal	1
12	1052600	Breakaway lock -left	1
13	1052700	Breakaway lock - right	1
14	793800	Lock washer 5/16" std	8
15	794900	Bolt - hex 5/16" - 18NC x 5/8"	4
16	1507000	Cylinder cover	1
17	794800	Bolt - hex 5/16" - 18NC x 1/2"	4
18	1593300	Inner slide	1
19	2374400	Master cylinder 1 1/4" bore - drum brake	1
	4831600	Master cylinder, drum, with 1209800 orifice	1
	4747100	Master cylinder 1 1/4" bore - disc brake	1
20	838800	Cylinder bracket right hand	1
21	1250300	Filler cap (included in 2374400)	1
22	774500	Gasket - for use with 1209900 orifice w/ 1/2" NF	1
23	1209800	Orifice connector, drum brake, 1/8 NPT	1
	4750300	Orifice connector, disc brake, 1/8" NPT	1
	1209900	Orifice, drum, early type, 1/2" NF thread	1
24	838900	Cylinder bracket, left hand	1
25	827100	Bolt - hex 3/8" - 16NC x 3"	2
26	797600	Hex nut 3/8 - 16NC	2
27	1255200	Star lock washer 3/8"	2
28	830100	Push rod block	1
29	1242600	Damper	2
30	829100	Rear roller	2
31	1593500	Master pin	2
32	815200	Cotter pin 3/16" x 1 1/4"	2
33	1593400	Damper pin	2
40	793700	Lock washer 1/2"	1
41	798500	Hex nut 1/2" - 13NC	1
42	144901	Grease zerk	1
48	1861900	Nylon washer	2
	2374600	Drum brake master cylinder assy	1
		complete with brackets	
	2374601	Drum brake master cylinder assy	1
		complete with brackets, painted black	
	4749500	Disc brake master cylinder assy	1
		complete with brackets	
	4749501042	Disc brake master cylinder assy	1
		complete with brackets - painted black	
	4750400	Back up valve kit - 1/2" NF master cylinders	1
	4748800	Back up valve kit - 1/8" NPT master cylinders	1

Model 20 Actuator - less Coupler

20,000 pound capacity, G.V.W.R., 2,000 pound tongue load

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1055100		Drum	STD	65	18	23744	2374600		Weld-On
4749700		Disc	STD	65	18	47471	4749501042		Weld-On

Model 20 Actuator Straight with Lunette Eye

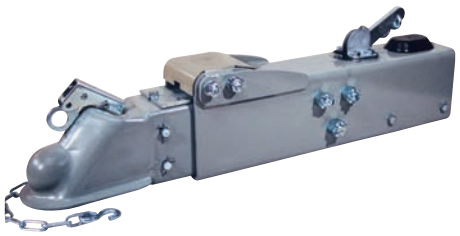
20,000 pound capacity, G.V.W.R., 2,000 pound tongue load

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1297400		Drum	STD	79	15	23744	2374600		L-Eye Weld-On

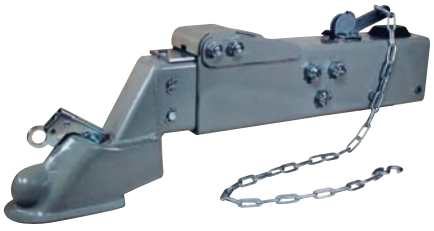
Disc Brake version available upon request

Model 20 Actuator Straight with 2 5/16" Ball Coupler

20,000 pound capacity, G.V.W.R., 2,000 pound tongue load



Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1521000		Drum	STD	74	15	23744	2374600	18487	2 5/16 CPLR Weld-On
4750500		Disc	STD	74	15	47471	4749501042	18487	2 5/16 CPLR Weld-On

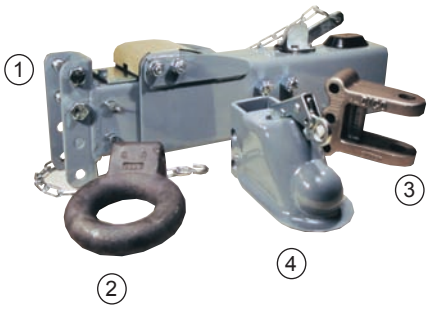


Model 20 Actuator - 2 5/16" Drop Coupler

20,000 pound capacity, G.V.W.R., 1,200 pound tongue load

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1735100		Drum	*NON-STD	76	12	23744	2374600	18487	2 5/16 CPLR Weld-On
4830400		Disc	*NON-STD	76	12	47471	4749501042	18487	2 5/16 CPLR Weld-On

Model 20 Actuator with Leveler Channel



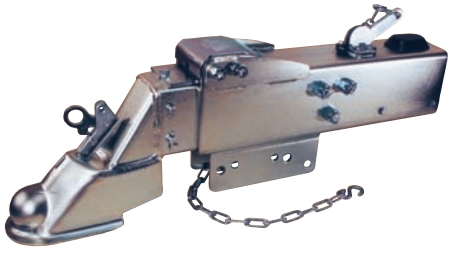
12,000 pound capacity, G.V.W.R., 1,200 pound tongue load

	Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
4	1889800		Drum	STD	82	15	23744	2374600	18487	w/18820 2 5/16 CPLR
4	4750000		Disc	STD	82	15	47471	4749501042	18487	w/18820 2 5/16 CPLR
2	1777800		Drum	STD	82	15	23744	2374600		w/16137 Lunette Eye
2	4750100		Disc	STD	82	15	47471	4749501042		w/16137 Lunette Eye

20,000 pound capacity, G.V.W.R., 2,000 pound tongue load

	Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1	1899100		Drum	STD	70	15	23744	2374600		Basic ACT Only
1	4749800		Disc	STD	70	15	47471	4749501042		Basic ACT Only
3	1811700		Drum	STD	81	15	23744	2374600		w/18078 Clevis Hitch
3	4749900		Disc	STD	81	15	47471	4749501042		w/18078 Clevis Hitch

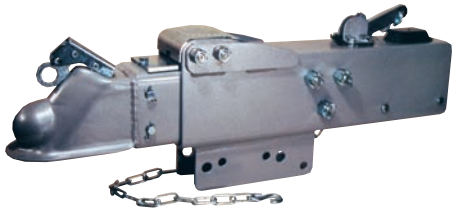
Model 20 Actuator - 2 5/16" Drop Coupler with Mounting Channel



20,000 pound capacity, GVWR., 2,000 pound tongue load

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
	4042700	Drum	STD	80	12	23744	2374600	18487	2 5/16 CPLR Bolt-On
	4750700	Disc	STD	80	12	47471	4749501042	18487	2 5/16 CPLR Bolt-On

Model 20 Actuator - 2 5/16" Straight with Mounting Channel

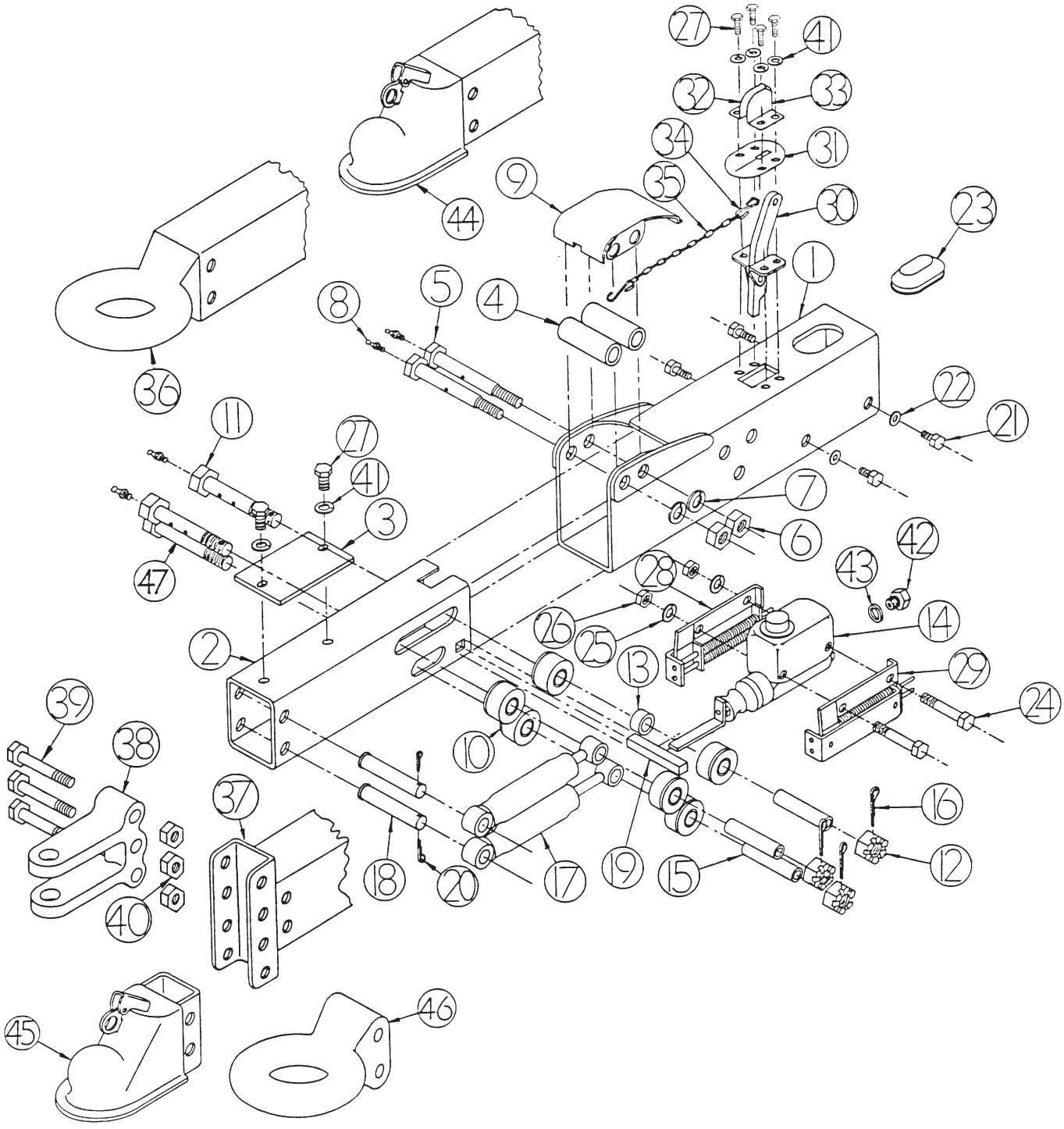


20,000 pound capacity, GVWR., 2,000 pound tongue load

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-Standard	Weight	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
	4053400	Drum	*NON-STD	78	12	23744	2374600	18487	2 5/16 CPLR Bolt-On

NOTE: Padlock (Master Lock #30) works with a 2 5/16" Ball Coupler.
Disc Brake version available upon request
*Non-Standard Actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 20 ACTUATOR PARTS DIAGRAM



(REFER TO DIAGRAM ON PAGE 38)

MODEL 20 ACTUATOR PARTS LIST

Key #	Part Number	Description
1	1055300317	Outer Case - Primer
	1734900	Outer Case w/Mounting Channel - Primer
	4488300	Outer Case w/Mounting Channel - Plated
2	1556300317	Inner Slide - No Coupler, Primer
	4490400317	Inner Slide w/2 5/16 Drop Coupler
	4490400183	Inner Slide w/2 5/16 Drop Coupler - Plated
3	0828400	Centering Rail
4	1601900	Front Roller - Plated
5	0828800	Front Roller Bolt 5/8"x 5 1/4" - 1/2 NC
6	0798500	Hex Nut 1/2" NC
7	0793700	Lockwasher 1/2"
8	0144901	Grease Zerk
9	0828900317	Front Roller Cover - Primer
	0828900183	Front Roller Cover - Painted
10	0829100	Rear Roller
11	0829400	Rear Roller Bolt - 5/8"x 5" NF, Grade 5
12	0797100	Slotted Hex Nut - 5/8" NF
13	0332800	Spacer
14	1250300	Filler Cap (included in 2374400)
14	2374400	Master Cylinder, Disc Brake, 1 1/4" bore
	4831600	Master Cylinder, Drum, with 1209800
	4747100	Master Cylinder, Disc Brake, 1 1/4" bore
15	0829700	Spacer
16	0799400	Cotter Pin, 1/8"x1 1/4"
17	0778400	Damper
18	0829800	Damper Pin
19	0830100	Pushrod Block
20	0799700	Cotter Pin, 1/8"x 3/4"
21	0798400	Bolt 5/16"x 1/2" NC, Grade 5
22	1248900	Star Lockwasher, 5/16"
23	1507000	Cylinder Cover
24	0827100	Bolt 3/8"x 3" NC, Grade 5
25	1255200	Star Lockwasher, 3/8"
26	0797600	Hex Nut 3/8" NC
27	0794900	Bolt 5/16"x 5/8" NC, Grade 5
28	0838800	RH Cylinder Bracket
29	0838900	LH Cylinder Bracket
30	1054100	Breakaway Lever Assembly
31	1055200	Weather Seal
32	1052700	RH Breakaway Lock
33	1052600	LH Breakaway Lock
34	1055500	S-Hook
35	0776800	Safety Chain
36	1297600	Inner Slide - 3" Lunette Eye
37	1058200317	Inner Slide - Leveler Channel
	1058200183	Inner Slide - Leveler Channel, plated
38	1807800	Clevis Hitch, for 1" Pin
39	0909300	Bolt, 5/8"x 4 1/4" NC, Grade 5
40	1040500	Locknut 5/8" NC
41	0793800	Lockwasher 5/16" STD
42	1209800	Orifice Connector, drum brake, 1/8" NPT
	4750300	Orifice Connector, disc brake, 1/8" NPT
	1209900	Orifice, drum brake, earlier 1/2" NF thread
	4748800	Solenoid back up valv, 1/8" NPT (not shown)
43	0774500	Gasket, used with 1209900 orifice
44	1278800	Inner Slide - 2 5/16" Coupler
	4488400	Inner Slide - 2 5/16" Coupler, plated
45	1882000	Adjustable Ball Coupler, 2 5/16"
	4721500	Adjustable Ball Coupler, 2 5/16", plated
46	1613700	Lunette Eye - 3" Adjustable, uncoated

⚠ WARNINGS ⚠

1) DO NOT submerge the actuator. Internal corrosion may result and cause brake failure. Salt water, granular fertilizers, and other corrosive materials are destructive to metal. To minimize the damaging effect of corrosion on a braking system used under corrosive conditions, we recommend that the actuator be externally flushed after each use with a high-pressure water hose. Be sure to lubricate all moving parts after the unit has dried. Whenever the unit will be out of service for an extended period of time, or after hard use, remove the brake drums and clean inside the brakes. Pack wheel bearings with grease before the drum is installed. Failure to properly and adequately grease and maintain the actuator could weaken it and/or cause it to fail and result in serious injury and/or property damage.

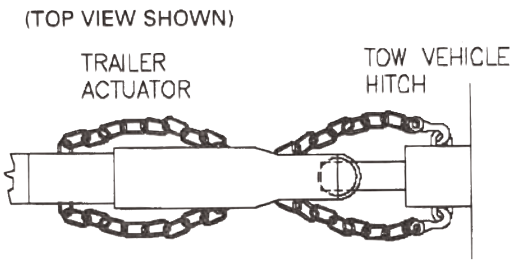
2) Failure to complete the “BRAKE FLUID FILLING AND BLEEDING” procedures promptly after installation may result in internal master cylinder corrosion and cause brake failure.

3) Use only fresh brake fluid from a sealed container. DO NOT reuse fluid. After filling and bleeding, remember to refill the actuator. Failure to maintain an adequate fluid level may cause brake failure.

4) To ensure proper engagement of the actuator’s coupler to the tow ball, DO NOT use a multi-piece ball, an incorrectly sized ball, or a worn/damaged ball.

5) The breakaway system is not designed to operate if the trailer does not separate completely from the tow vehicle, or if the trailer tongue “submarines” and goes beneath the tow vehicle. DO NOT use the breakaway system as a parking brake.

6) The trailers safety chains’ length MUST be set short enough so the actuator’s breakaway cable/chain is not pulled if the coupler separates from the tow vehicle’s hitch but remains connected by the safety chains. The breakaway system should only activate after BOTH the trailer’s coupler AND safety chains have failed and allowed the trailer to completely separate from the tow vehicle. Provide just enough slack in the trailer safety chains to allow tight turns. The chains should not drag on the ground. Safety chains must be used. When towing, AVOID sharp turns which can cause the actuator to bind against the tow vehicle. This can damage the actuator and trailer, causing brake failure. AVOID towing across severe bumps or dips, which may cause the tow hitch to lever against the actuator/coupler and compromise the connection.



2” inch Adjustable Ball Coupler

G.V.W.R. 7,500 lbs. - to be used with Model 6 ONLY.

Part No. Painted	Part No. Plated	Description	Pallet Quantity	Weight (Pounds)	Standard Non-Standard
4746900		Primed	75		NSTD

Coupler Assembly 2 5/16” Primed

G.V.W.R. 20,000 lbs.

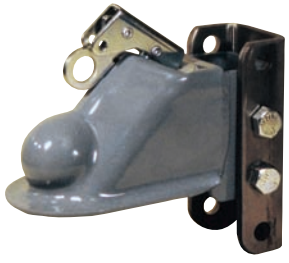
Part No. Painted	Part No. Plated	Description	Pallet Quantity	Weight (Pounds)	Standard Non-Standard
1755000		Primed	75	10	STD
1755000UP		Unpainted	75	10	NSTD

Weld to 3” wide tongue.

Adjustable Ball Coupler 2 5/16”

G.V.W.R. 12,000 lbs.

Part No. Painted	Part No. Plated	Description	Pallet Quantity	Weight (Pounds)	Standard Non-Standard
1882000		Primed	75	11	STD
	4721500	Plated	75	11	NSTD



Adjustable Ball Coupler Assembly

G.V.W.R. 12,000 lbs.

Part No. Painted	Part No. Plated	Description	Pallet Quantity	Weight (Pounds)	Standard Non-Standard
2330900		CPLR w/parts	—	16	STD

Assembly includes parts:
0897800 Channel
0909300 Bolts (2)
1040500 Nuts (2)
1882000 Coupler

2” inch Straight Multi-fit Coupler

G.V.W.R. 5,000 lbs.

Part No. Painted	Part No. Plated	Description	Pallet Quantity	Weight (Pounds)	Standard Non-Standard
2343400		Primed	—	6	STD

Fits 1 7/8”, 50mm, and 2” balls, G.V.W.R. limited to ball rating.

The TITAN HITCH has been designed to meet the need for an adjustable hitch. The channel forming the backplate welds onto the tongue or brake actuator. Rated capacity 2,000 lbs. tongue load.

Lunette Eye 3” Adjustable Unpainted Ductile Iron

12,000 lbs. capacity GVWR.

Part No.		Description	Pallet Quantity	Weight (Pounds)	Standard Non-Standard
1613700		Unpainted		11	STD
1613700183		Plated		11	NSTD

Leveler Channel 3½” Wide

Part No.		Description	Pallet Quantity	Weight (Pounds)	Standard Non-Standard
0897800	4 hole	Unpainted		4	STD
4833700	6 hole	Unpainted		8.5	STD

Adjustable 3” Lunette Eye Assembly

G.V.W.R. 12,000 lbs.

Part No.		Description	Pallet Quantity	Weight (Pounds)	Standard Non-Standard
1812800		Unpainted		16	STD

Assembly includes parts:
0897800 Channel
0909300Bolt (2)
1040500 Nuts (2)
1613700 Lunette Eye

Adjustable ¾” Clevis Hitch Assembly - 2 Bolt

G.V.W.R. 12,000 lbs. Use ¾” pin.

Part No.		Description	Pallet Quantity	Weight (Pounds)	Standard Non-Standard
0909500		Unpainted		13	STD

Assembly includes parts:
0897800 Channel
0909300 Bolt (2)
1040500 Nuts (2)
0897900 Clevis Hitch

Adjustable 1” Clevis Hitch Assembly - 3 Bolt

G.V.W.R. 20,000 lbs. Use 1” pin.

Part No.		Description	Pallet Quantity	Weight (Pounds)	Standard Non-Standard
1812200		Unpainted		16	STD

Assembly includes parts:
0897800 Channel
0909300 Bolt (3)
1040500 Nuts (3)
1807800 Clevis Hitch

Brake Flanges

Application Size	Part No.	No. of Bolt Holes	Bolt Circle	Center Hole Size	Center Hole Style	Weight
8 1/2" - 10"	0723800	4	4"	1 1/2"		3/4 lb.
8 1/2" - 10"	0872400	4	4"	1 3/4"	Round	3/4 lb.
12"	1040800	5	3 7/8"	2 1/64"	Round	1 lb.
12"	1040900	5	3 7/8"	2 9/64"	Round	1 lb.
12"	1041000	5	3 7/8"	2 35/64"	Round	1 lb.
13"	0964700	4	4 13/16"	2" / 1 3/4"	Round / Square	1 lb.
13"	1042500	4	4 13/16"	2 3/4"	Round	1 lb.
13"	1241500	4	4 13/16"	2 5/8"	Round	1 lb.
13"	1812300	4	4 13/16"	3 1/2"	Round	1 lb.
13"	4019900	4	4 13/16"	3"	Round	1 lb.
13"	4832800	4	4 13/16"	3 1/4"	Round	1 lb.

Standard Hydraulic Brake Fitting & Tubing Kits

Part No.	Description
1087200	Tandem
1087100	Single Axle
1087400	Torsion
1087500	8 1/2" Brakes
4829900	Single Torsion Axle Tubing Kit
4830000	Tandem Torsion Axle Tubing Kit

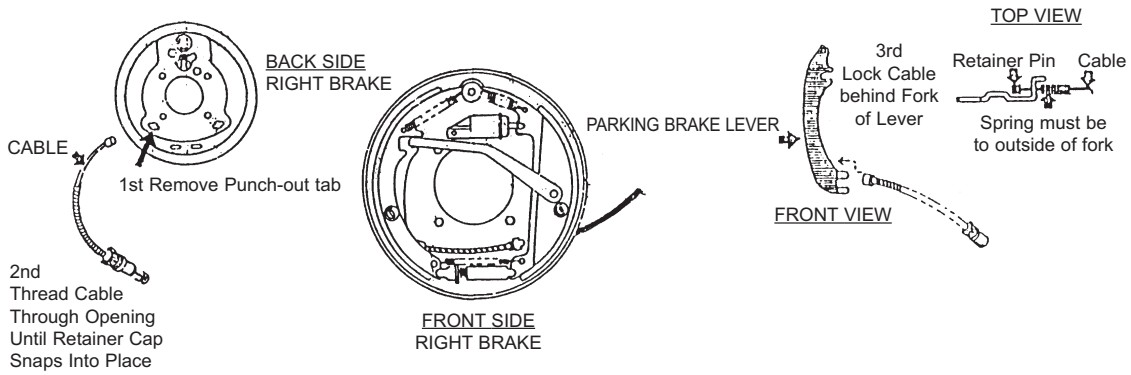
No Photo

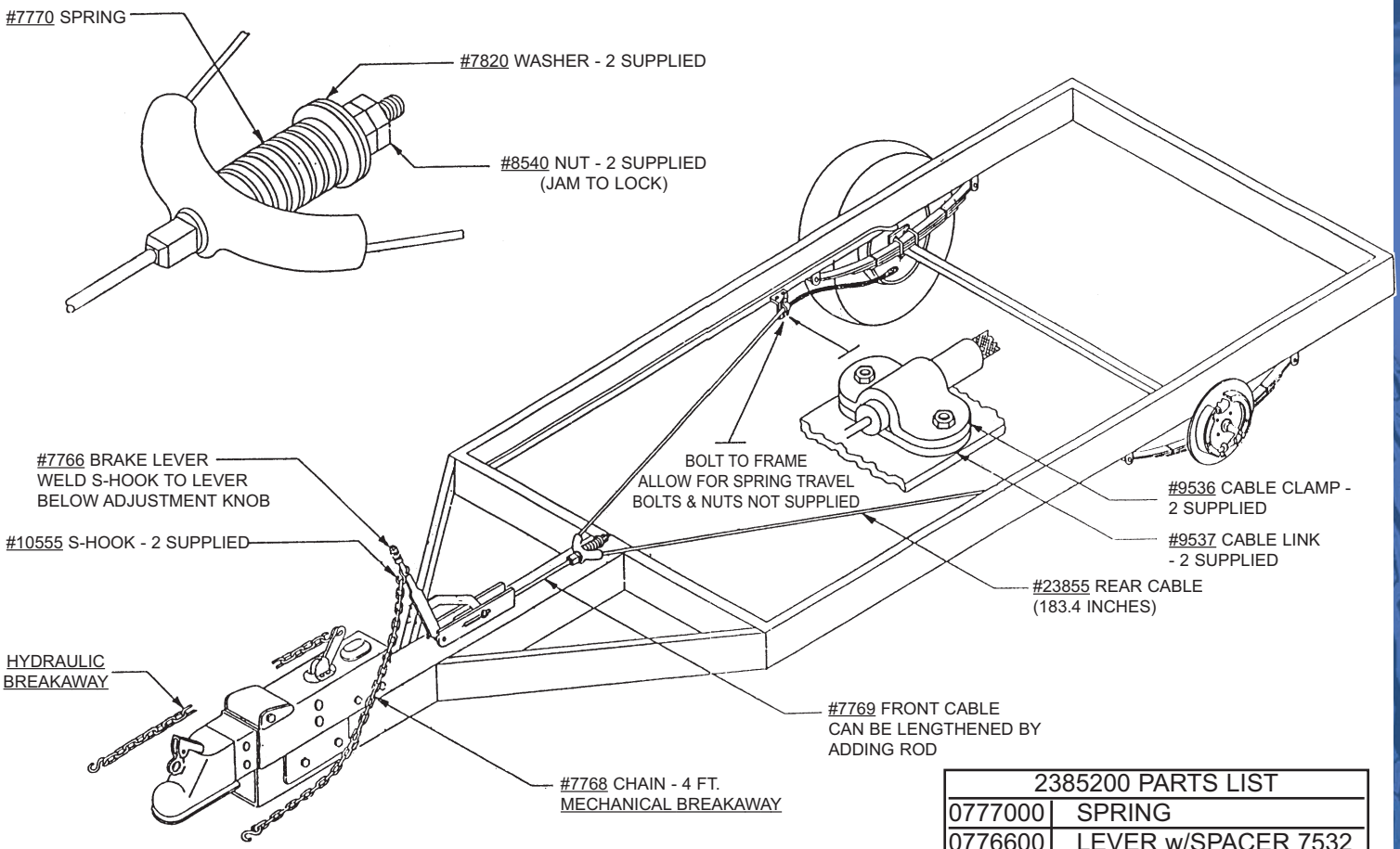
Available Brake Kits	Description
1772900	Brake fitting kit tandem axle (Extended length)
1531200	Brake fitting kit single axle (Extended length)
4043400	12x2 brake shoe spring kit
4043300	10x2-1/2 brake shoe sprg. kit
4043200	12x2 brake shoe kit
4043100	10x2-1/4 brake shoe kit
4043600	12x2 adjuster assy. kit

BREAKAWAY AND PARKING KIT #2385200

This installation drawing will show how the cable enters through the backing plate and is attached to the park linkage. This drawing also shows the proper layout of the various components on the trailer frame.

In the event of a breakaway, the lever is pulled to the “on” position. The cable type breakaway will stop and hold the trailer indefinitely as opposed to the hydraulic breakaway that can leak fluid and lose pressure.





2385200 PARTS LIST	
0777000	SPRING
0776600	LEVER w/SPACER 7532
0776900	FRONT CABLE
2385500	REAR CABLE
0953600	CLAMP
0953700	LINK
0776800	CHAIN
1055500	S-HOOK
0782000	FLAT WASHER
0854000	HEX NUT

HUBS (STEEL & CAST)

12832-00CB042

(Steel)

16859-00CB042

(Cast)

40845-00CB042

(Cast)

40191-00C042

(Cast Tapped)

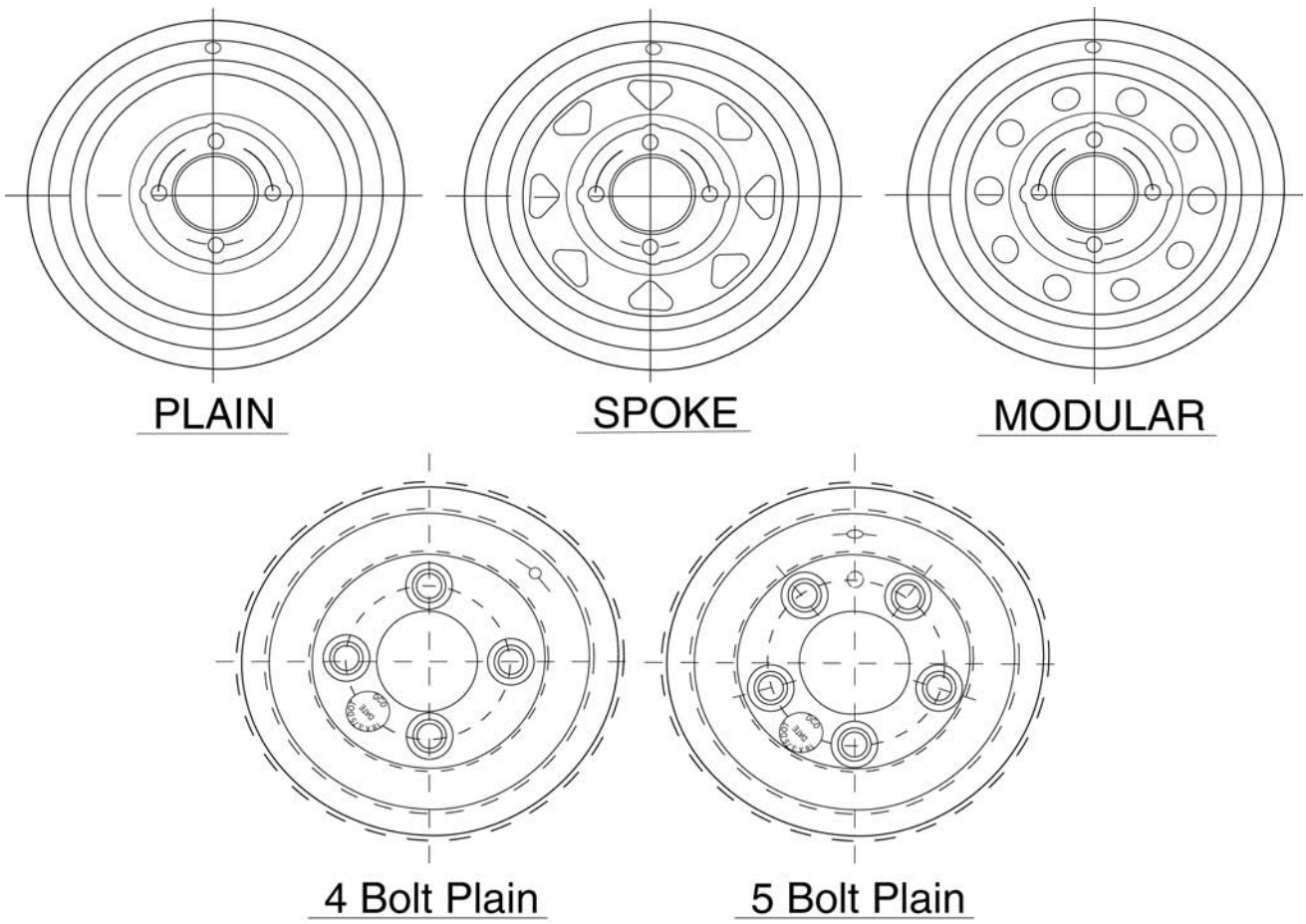
Product Number	Certified Capacity Lbs./hub	Bolt Circle	Tapered Roller Bearing Inner	Tapered Roller Bearing Outer	Hub Length	Flange O.D.	Wt. Lbs.	Studded-Drilled & Tapped	Plt. Qty.	Used With Spindle
A-Frame Hubs (Steel)										
1286800042	500	5-4.50	3/4”	3/4”	4”	5-3/8	4.0	w/parts	180	0423200
1286800CB042	500	5-4.50	NONE	NONE	4”	5-3/8	2.8	Studded	180	
1545000042	1000	4-4.00	1”	1”	4-1/8”	5-5/8	4.0	w/parts	180	0502900
1545000CB042	1000	4-4.00	NONE	NONE	4-1/8”	5-5/8	3.3	studded	180	
1283200042	1000	5-4.50	1”	1”	4-1/8”	5-5/8	4.3	w/parts	180	0502900
1283200CB042	1250/1000	5-4.50	NONE	NONE	4-1/8”	5-5/8	4.2	studded	180	
1544900042	1000	4-4.00	1-1/16”	1-1/16”	4-1/8”	5-5/8	4.0	w/parts	180	1048900
1563000042	1250	5-4.50	1-1/16”	1-1/16”	4-1/8”	5-5/8	4.3	w/parts	180	1048900
1283800CB042	1250	5-4.50	NONE	NONE	3-3/8”	5-5/8		studded	180	
1284200042	1250	5-4.50	1-1/4”	1-1/4”	3-3/4”	5-5/8	4.7	w/parts	180	0434600
1284200CB042	1250	5-4.50	NONE	NONE	3-3/4”	5-5/8	2.7	studded	180	
Cast Hubs										
4019000042	1000	4-4.00	1”	1”	4-1/8”	5-1/2	6.3	Tapped	252	0502900
4019100C042	1000	4-4.00	NONE	NONE	4-1/8”	5-1/2	6.3	Cup Only Tapped	252	
4085300042	1000	4-4.00	1”	1”	4-1/8”	5-1/2	5.8	Studded	252	0502900
4085200CB042	1000	4-4.00	1”	1”	4-1/8”	5-1/2	5.0	Studded	252	
4018700042	1000	5-4.50	1”	1”	4-1/8”	5-1/2	6.3	Tapped	252	0502900
4018900C042	1250	5-4.50	NONE	NONE	4-1/8”	5-1/2	6.2	Cup Only Tapped	252	
4214000042	1250	4-4.00	1-1/16”	1-1/16”	4-1/8”	5-1/2	6.3	Tapped	252	1048900
4214200042	1250	5-4.50	1-1/16”	1-1/16”	4-1/8”	5-1/2	6.3	Tapped	252	
4084600042	1250	5-4.50	1”	1”	4-1/8”	5-11/16	6.6	Studded	180	0502900
4084500CB042	1250	5-4.50	NONE	NONE	4-1/8”	5-11/16	5.0	Studded	180	
4206800042	1250	5-4.50	1-1/16”	1-1/16”	4-1/8”	5-11/16	6.6	Studded	180	0502900
*0508400	1750	5-5.50	1-3/8”	1-3/8”	3-1/2”	6-3/4	11	Studded		0651700
*0508500CB	1750	5-5.50	NONE	NONE	3-1/2”	6-3/4	9.0	Studded		
1686000042	1750	5-4.50	1-3/8”	1-1/16”	4”	6-1/2	9.0	Studded	180	1243400
1685900CB042	1750	5-4.50	NONE	NONE	4”	6-1/2	8.1	Studded	180	
1721400042	1250	5-4.50	1-1/4”	3/4”	4-1/8”	6-1/2	9.0	Studded	180	0710700
1721300CB042	1250	5-4.50	NONE	NONE	4-1/8”	6-1/2	8.4	Studded	180	
*2339900	1250	5-4.50	Tapered		1-1/2”	5-5/8	4			
1699300042	2600	6-5.50	1-3/4”	1-1/4”	4.52”	7-1/8	11.0	Studded		1703600
1699200CB042	2600	6-5.50	NONE	NONE	4.52”	7-1/8	11.3	Studded		
*1617000	1250	5-4.50	Tapered		1-1/2”	5-5/8	4			

All hubs, except tapped, are furnished with stud bolts and cups installed. Component parts of cones, seals, dust caps, and wheel nuts are shipped loose.
Tapped hubs are furnished with cups installed, lug bolts, cones, seals and dust caps loose.
*Hubs not painted.
Some spindles may be non-standard and require lead time.

Tire Conversion Chart

Alpha Series	Section Width	Outside Dia.	Metric Series	Section Width	Outside Dia.
A78-13B	6.5	24.3	ST155/80D13-C	N/A	N/A
B78-13B/C	6.9	25.0	ST175/80D13-B/C	6.8	24.02/24.41
C78-13C	7.1	25.0	ST185/80D13-C	7.2	24.65/25.12
E78-14C	7.6	26.7	ST205/75D14-C	7.6	26.14/26.69
F78-14C	8.0	27.4	ST215/75D14-C	8.0	26.69/27.24
G78-14C	8.5	27.9	SAME AS ABOVE		
F78-15C	8.1	28.5	ST205/75D15-C	7.9	27.6
H78-15C/D	8.6	29.6	ST225/75D15-C/D	9.0	28.8

Wheel Styles



Standard Highway Trailer Wheel and Tire Assemblies

8" Diameter

Trailer Wheels

Available Wheel Finishes: Call You Customer Service Representative

Size	Bolt Circle	Center Hole	Load Rating	Wheel Design	Titan Number	Wheel Code	Tire Code Compatibility
8x 3.75	4-4.00"	2.50"	910	Plain	06227	A	1-5
8x 3.75	5-4.50"	2.82"	910	Plain	06903	B	1-5
8x 5.375	4-4.00"	2.50"	795	Plain	09845	C	6-7
8x 5.375	5-4.50"	2.82"	795	Plain	09842	D	6-7
8x 7	4-4.00"	2.50"	940	Plain	45023	E	8-9
8x 7	5-4.50"	2.82"	940	Plain	15347	F	8-9

Bias Highway Trailer Tires

Tire Size	Load Range	Capacity	PSI	Outside Diameter Inches	Width (Inches)	Product Number	Tire Code	Wheel Code Compatibility	Weight (lbs.)
4.80-8	B	590	60	16.6	4.9	1106901-808	2	A-B	6.7
4.80-8	C	745	90	16.6	4.9	1107900-808	3	A-B	7.3
5.70-8	B	715	50	18.3	5.7	1114300-808	4	A-B	8.8
5.70-8	C	910	75	18.3	5.7	1115000-808	5	A-B	9.4
16.5X6.5-8	C	795	70	16.1	6.5	463307	7	C-D	8.6
18.5x8.5-8	C	940	50	18.3	8.2	1136605	9	E-F	12.0

Standard Highway Trailer Wheel and Tire Assemblies

10" Diameter

Trailer Wheels

Available Wheel Finishes: Call Your Customer Service Representative

Size	Bolt Circle	Center Hole	Load Rating	Wheel Design	Titan Number	Wheel Code	Tire Code Compatibility
10x6	4-4.00"	2.82"	1,535	Plain	43260	A	1-4
10x6	5-4.50"	2.95"	1,535	Plain	43259	B	1-4
10x6	5-5.50"	4.00"	1,535	Plain	15850	C	1-4

Bias Highway Trailer Tires

Tire Size	Load Range	Capacity	PSI	Outside Diameter Inches	Width (Inches)	Product Number	Tire Code	Wheel Code Compatibility	Weight (lbs.)
20.5x8.0-10	C	1,105	50	20.6	8.1	1139100	2	A-G	14.0
20.5x8.0-10	D	1,330	70	20.6	8.1	1139410	3	A-G	16.5
20.5x8.0-10	E	1,535	90	20.6	8.1	1139690	4	A-G	18.1

Standard Highway Trailer Wheel and Tire Assemblies

12" Diameter

Trailer Wheels

Available Wheel Finishes: Call Your Customer Service Representative

Size	Bolt Circle	Center Hole	Load Rating	Wheel Design	Titan Number	Wheel Code	Tire Code Compatibility
12x 4	4-4.00"	2.82"	1,045	Plain	44161	A	1-4
12x 4	5-4.50"	2.95"	1,045	Plain	44030	B	1-4
12x 4	4-4.00"	2.82"	1,045	Spoke	44081	C	1-4
12x 4	5-4.50"	2.95"	1,045	Spoke	44079	D	1-4
12x 4	4-4.00"	2.82"	1,045	Modular	44163	E	1-4
12x 4	5-4.50"	2.95"	1,045	Modular	44165	F	1-4

Bias Highway Trailer Tires

Tire Size	Load Range	Capacity	PSI	Outside Diameter Inches	Width (Inches)	Product Number	Tire Code	Wheel Code Compatibility	Weight (lbs.)
4.80-12	B	780	60	20.6	4.9	11099001	1	A-F	8.2
5.30-12	B	840	55	21.4	5.4	11123051	3	A-F	9.7
5.30-12	C	1,045	80	21.4	5.4	11127031	4	A-F	10.6

Standard Highway Trailer Wheel and Tire Assemblies

13" Diameter

Trailer Wheels

Available Wheel Finishes: Call Your Customer Service Representative

Size	Bolt Circle	Center Hole	Load Rating	Wheel Design	Titan Number	Wheel Code	Tire Code Compatibility
13x 4.5	4-4.00"	2.82"	1,065	Plain	44208	A	1-8
13x 4.5	4-4.00"	2.82"	1,065	Spoke	44175	B	1-8
13x 4.5	5-4.50"	2.95"	1,480	Plain	44209	C	1-10
13x 4.5	5-4.50"	2.95"	1,480	Modular	44179	D	1-10
13x 4.5	5-4.50"	2.95"	1,480	Spoke	44173	E	1-10

Bias Highway Trailer Tires

Tire Size	Load Range	Capacity	PSI	Outside Diameter Inches	Width (Inches)	Product Number	Tire Code	Wheel Code Compatibility	Weight (lbs.)
ST 175/80 D13	B	1,100	35	24.3	6.8	5ST367	2	A-E	17.1
ST 175/80 D13	C	1,360	50	24.3	6.8	5ST368	3	C-E	17.2
ST 185/80 D13	C	1,480	50	24.9	7.1	5ST320	4	C-E	18.4

Radial Highway Trailer Tires

Tire Size	Load Range	Capacity	PSI	Outside Diameter Inches	Width (Inches)	Product Number	Tire Code	Wheel Code Compatibility	Weight (lbs.)
ST 155/80 R13	C	1,100	50	23.1	5.8	4ST310	6	A-E	17
ST 175/80 R13	C	1,360	50	24.0	7.1	4RT368	9	C-E	18.9
ST 185/80 R13	C	1,480	50	24.7	7.3	4RT320	10	C-E	19.9

Standard Highway Trailer Wheel and Tire Assemblies

14" Diameter

Trailer Wheels

Available Wheel Finishes: Call Your Customer Service Representative

Size	Bolt Circle	Center Hole	Load Rating	Wheel Design	Titan Number	Wheel Code	Tire Code Compatibility
14x 6	5-4.50"	3.30"	1,870	Spoke	40139	A	1-7
14x 6	5-4.50"	3.30"	1,870	Modular	42196	B	1-7

Bias Highway Trailer Tires

Tire Size	Load Range	Capacity	PSI	Outside Diameter Inches	Width (Inches)	Product Number	Tire Code	Wheel Code Compatibility	Weight (lbs.)
ST 205/75 D14	C	1,760	50	26.9	8	5ST357	1	A,B	20.8
ST 215/75 D14	C	1,870	50	27.1	8.2	5ST352	2	A,B	21.4

Radial Highway Trailer Tires

Tire Size	Load Range	Capacity	PSI	Outside Diameter Inches	Width (Inches)	Product Number	Tire Code	Wheel Code Compatibility	Weight (lbs.)
ST 205/75 R14	C	1,760	50	26.1	8.0	4RT357	5	A,B	23.1
ST215/75 R14	C	1,870	50	26.6	8.7	4RT352	7	A,B	25.2

Standard Highway Trailer Wheel and Tire Assemblies

15" Diameter

Trailer Wheels

Available Wheel Finishes: Call Your Customer Service Representative

Size	Bolt Circle	Center Hole	Load Rating	Wheel Design	Titan Number	Wheel Code	Tire Code Compatibility
15x 6	5-4.50"	3.30"	2,150	Spoke	40140	A	1, 2, 4, 5, 6
15x 6	5-4.50"	3.30"	2,150	Modular	42254	B	1, 2, 4, 5, 6
15x 6	6-5.50"	3.65"	2,600	Plain	18559	C	1-7
15x 6	6-5.50"	4.27"	2,150	Spoke	40008	D	1, 2, 4, 5, 6
15x 6	6-5.50"	4.27"	2,600	Modular	43922	E	1-7
15x 6	6-5.50"	4.27"	2,600	Spoke	5606557843171	F	1-7

Bias Highway Trailer Tires

Tire Size	Load Range	Capacity	PSI	Diameter Inches	Outside Width (Inches)	Product Number	Tire Code	Wheel Code Compatibility	Weight (lbs.)
ST 205/75 D15	C	1,820	50	28	8.1	5ST318	1	A-F	23.5
ST 225/75 D15	C	2,150	50	29.2	8.6	5ST346	2	A-F	25.6
ST 225/75 D15	D	2,540	65	29.2	8.6	5ST347	3	C, E, F	26.7

Radial Highway Trailer Tires

Tire Size	Load Range	Capacity	PSI	Diameter Inches	Width (Inches)	Product Number	Outside Tire Code	Code Compatibility	Weight (lbs.)
ST 205/75 R15	C	1,820	50	27.2	8.0	4RT318	4	A-F	24
ST 205/75 R15	D	2,120	65	27.2	8.0	4RT319	5	A-F	28
ST 225/75 R15	C	2,150	50	28.4	8.8	4RT346	6	A-F	27
ST 225/75 R15	D	2,540	65	28.4	8.8	4RT347	7	C,E,F	31
ST 225/75 R15	E	2,830	80	28.5	8.8	4RT348	-	-	32

Standard Highway Trailer Wheel and Tire Assemblies

16" Diameter

Trailer Wheels

Available Wheel Finishes: Call Your Customer Service Representative

Size	Bolt Circle	Center Hole	Offset	Load Rating	Wheel Design	Titan Number	Wheel Code	Tire Code Compatibility
16x 6	6-5.50"	4.28"	0	2,440	Plain	44915	A	1
16x 6	8-6.50"	4.28"	0	2,780	Plain	45002	B	1-2
16x 6	6-5.50"	4.28"	0	2,440	Spoke	44982	C	1
16x 6	8-6.50"	4.28"	0	2,780	Spoke	44914	D	1-2
16x 6	8-6.50"	4.95"	0	3,800	Mod	66086583131	E	3

Radial Highway Trailer Tires

Tire Size	Load Range	Capacity	PSI	Outside Diameter Inches	Width (Inches)	Product Number	Tire Code	Wheel Code Compatibility	Weight (lbs.)
ST235/80R16	E	3,520	80	30.8	9.3	4RT090	3	E	52

Warning

⚠ WARNING

The task of servicing tires and wheels can be extremely dangerous and should be performed by trained personnel only, using the correct tools and following the procedures presented in the manufacturer's catalog. Additional safety information can be found in literature published by the Rubber Manufacturer's Association, Washington D.C.; the National Tire Dealers and Retreaders Association, Washington D.C.; OSHA, Washington D.C.; and the National Wheel and Rim Association, Jacksonville, FL.

Department of Labor Occupation Safety and Health Administration (OSHA) 29 CFR part 1910.177 entitled Servicing of Single-piece and Multi-piece Rim Wheels. NOTE: Single piece rims have the rims made out of a single piece of material (no removable components) and multi-piece rims have a loose flange or flanges, a bead seat and a lock ring.

We have shown step by step safety operations for single-piece rims in this catalog. This and any other safety related information in Titan's Catalogs is issued as assistance to supervisory and operator personnel in the actual tire/rim service environment. The responsibility for implementation of this safety information rests with operational and supervisory personnel carrying out the actual service work. Read and fully understand all procedures before attempting tire/wheel servicing.

⚠ If you have any doubt in the correct, safe method of performing any step in the demounting, mounting, or inflating process **STOP**! Seek out expert assistance.

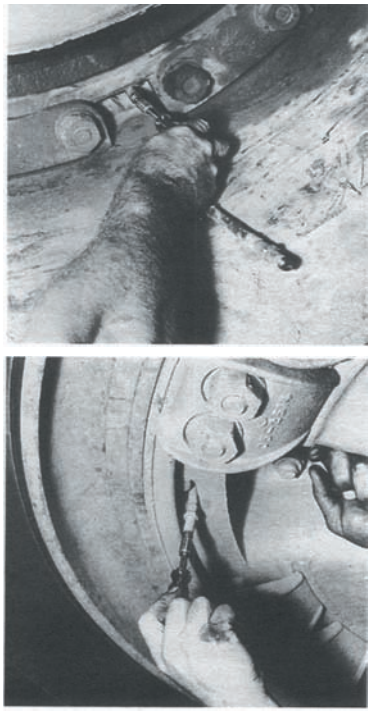
Wear protective gloves, footwear, safety glasses and head gear when servicing tire and wheel components.

SAFETY FIRST!

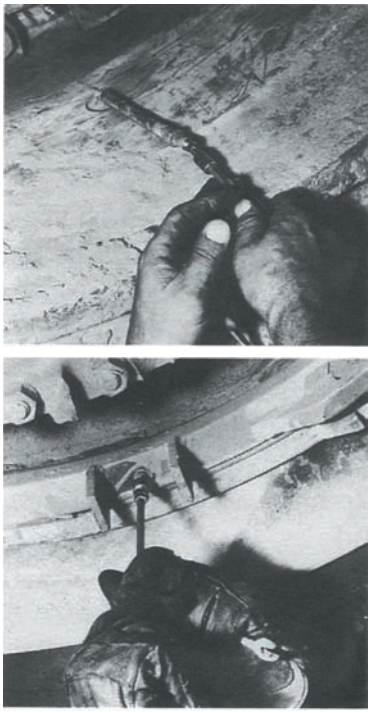
IMPORTANT!

THIS IS THE FIRST STEP IN ALL DEMOUNTING OPERATIONS

Always remove the valve core and exhaust all air from a wheel/tire assembly prior to attempting to demount the tire from the wheel. Check the valve stem by running a piece of wire through the stem to make sure it is not plugged.



Person removing valve core from highway wheel.



Person running a piece of wire through the stem of a highway wheel.

READ AND FOLLOW THE SAFETY INSTRUCTIONS. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY.

GENERAL WARNINGS

This symbol ⚠ indicates a warning message.

⚠ Failure to heed warnings could lead to serious injury or death.

- The task of servicing tires and wheels can be extremely dangerous and should be performed by trained personnel only, using the correct tools, and following the procedures presented here and in manufacturer's catalogs, instruction manuals, or other industry and government instruction material.

- Several types of tire changing equipment are available. Installers should be fully trained in correct operating procedures and safety instructions for the specific machine being used. Always read and understand any manufacturer's warning contained in the product literature or posted on the equipment.

- Always use approved tire and rim combinations for sizes and contours.

- Always wear personal protection equipment such as gloves, footwear, eye protection, hearing protection, and head gear when servicing tire and wheel components.

- Never exceed manufacturer's recommended tire inflation pressure.

- Always use proper lifting techniques, and mechanized lifting aids to move heavy components and assemblies.

- Always take care when moving tire and wheel that other people in the area are not endangered.

- Never leave a tire, wheel, or assembly unsecured in a vertical position.

- Parts that are cracked, worn, pitted with corrosion, or damaged must be destroyed, discarded, and replaced with known good parts.

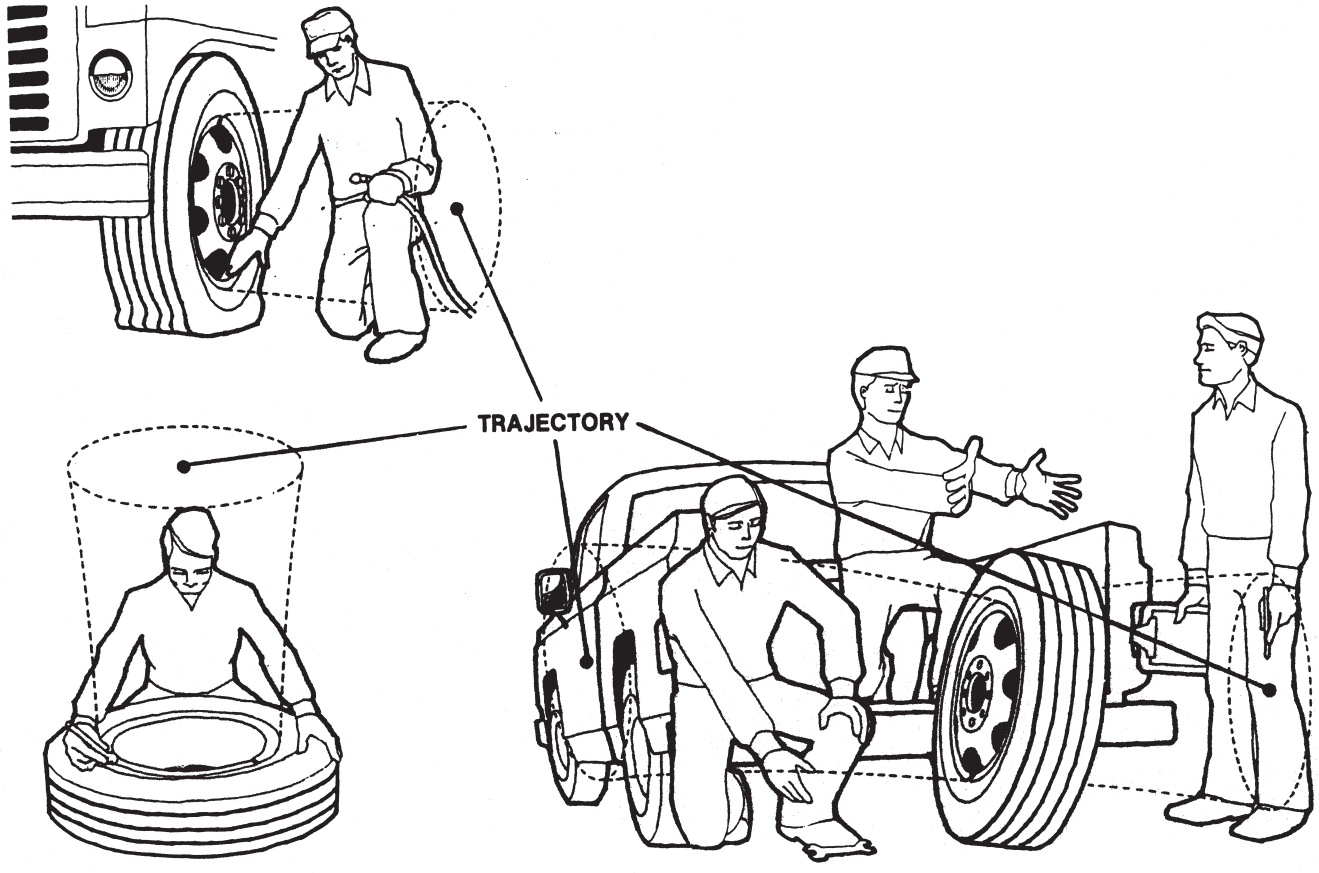
- Always exhaust all air from the tire prior to demounting.

- Never try to repair wheel, rim, or tire component parts. Replace all damaged, worn, or suspect parts with known good parts.

- Never reinflate a tire that has lost 80% of its original pressure or has been run flat at any time. Always disassemble and inspect for damage.

- When conducting routine tire inspections also conduct a visual inspection of wheel and rim components. Always correct any non-conformities found.

- Always use restraining devices when inflating tires.



⚠ Never stand, lean or reach across the potential tire and wheel component trajectory danger zones, as shown above.

- Additional safety information can be found in literature published by the Rubber Manufacturer's Association, Washington, D.C.; The National Tire Dealer and Retreading Association, Washington, D.C.; The National Wheel and Rim Association, Jacksonville, FL.; and OSHA, Washington, D.C.

- Always completely deflate the tire (both tires of a dual tire assembly) by removing the valve core(s) from valve(s) before attempting any demounting or disassembling. Check the valve stem by running a piece of wire through the stem to make sure it is not plugged.

ALWAYS use a new tube. A serviceable tube removed for any reason must be returned to the same tire or destroyed.

ALWAYS use a radial tube in a radial tire.

ALWAYS be sure that the tube is clean and that the inside of the tire is free of foreign material and damage.

ALWAYS be sure tire and rim sizes are compatible.

NEVER install a tube as a substitute for a proper repair.

NEVER mount a tire on a wheel rim that is damaged or which had been repaired by welding or brazing.

NEVER install a larger- or smaller-sized tube than was designed for the tire being used.

With spoked wheel rims, if the spoke ends are visible in the bottom of the well, even tubeless tires require tubes (radial tubes for radial tires) to prevent air leakage. An effective "rim strip" must cover the spoke ends in the drop center rim well so that the spoke ends will not chafe the tube.

NEVER use petroleum-based lubricants.

Demounting Standard Highway Trailer Wheel and Tire Assemblies (Tubeless Tires)

Tools required: valve core remover, bead breaker, vegetable-based lubricant, tire changer machine

⚠ If you have any doubt in the correct, safe method of performing any step in the demounting, mounting, or inflating process **STOP!** Seek expert assistance from a qualified person.

⚠ Always completely deflate the tire by removing the valve core before attempting any demounting operation. Check the valve stem by running a piece of wire through the stem to make sure it is not plugged.

⚠ Stand clear of trajectory danger zone when deflating.

1. Remove all old balance weights from rim prior to demounting to prevent bead tearing from weight clip. Place tire in a horizontal position on changer, as shown.

⚠ Do not drop or throw tire onto the changer.

2. The wheel should be centered and securely fastened on the changer with the hold-down mechanism. In this illustration, the hold-down is a cone which the serviceperson is placing over the center shaft. Worn or damaged cones should be replaced.

3. Use a bead breaker, as shown, to loosen the upper tire bead from the upper rim flange. If the tire does not readily separate from the rim flange, apply a vegetable-based lubricant to the tire bead/rim flange area, rotate wheel and repeat this step.

⚠ Never use a petroleum-based lubricant. Use a vegetable-based lubricant only.

⚠ Never use a hammer to loosen the tire bead from the flange.

⚠ Check that the bottom bead breaker is making full contact with the tire. Contact with the wheel while breaking the bead may cause damage to the wheel or the demounting equipment.

⚠ Keep fingers clear of pinch points.

4. After beads are loosened from rim flanges, the inside of the wheel and both bead areas of the tire should be lubricated again. This makes it easy to remove the tire from the wheel without damage.

⚠ Never use a petroleum-based lubricant. Use a vegetable-based lubricant only.

5. Use a tire iron to bring the bead of the tire onto the rotating finger of the tire changer. Hold the tire bead in the center wheel well during this operation.

⚠ Never use a pipe or a make-shift bar.

⚠ Keep fingers clear of pinch points.

Demounting Standard Highway Trailer Wheel and Tire Assemblies (Tubeless Tires) (Cont.)

⚠ If you have any doubt in the correct, safe method of performing any step in the demounting, mounting, or inflating process **STOP!** Seek expert assistance from a qualified person.

6. Start the tire changer to remove the top bead from the wheel. Properly lubricated, the bead will slip away from the rim flange of the wheel with ease if the tire bead is held in the center well of the wheel, as shown.

⚠ Keep fingers clear of pinch points.

8. Use tire iron to raise bottom bead and bring it over the rotating finger of the changer. The side of the tire opposite the rotating arm must be down in the center well of the wheel and held in this position by the hip and hand.

⚠ Keep fingers clear of pinch points.

7. Again lubricate the tire beads and bead seat areas of the wheel, including drop-center well of the wheel. This lubrication is necessary to enable the bead of the tire to slip down into the center well.

⚠ Never use a petroleum-based lubricant. Use a vegetable-based lubricant only.

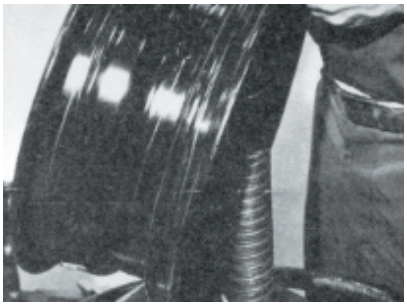
Mounting Standard Highway Trailer Wheel and Tire Assemblies (Tubeless Tires)

Tools required: Wire brush, valve stem insertion tool, valve core insertion tool, extension hose with in-line gauge and clip-on air chuck, air inflation gauge, vegetable-based lubricant, tire changer machine

⚠ If you have any doubt in the correct, safe method of performing any step in the demounting, mounting, or inflating process **STOP!** Seek expert assistance from a qualified person.

⚠ ALWAYS replace a tire on a rim with another tire of exactly the same rim diameter designation.

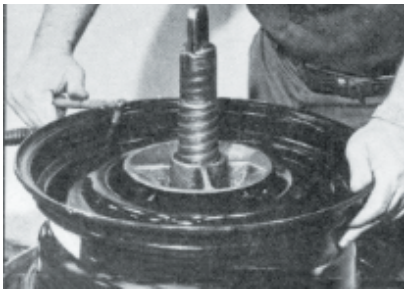
⚠ Rims of different diameters and tapers CANNOT be interchanged.



1. Never mount a tire on a rim that is damaged, or has been repaired by welding or brazing. Be certain that rim flanges and bead ledges (especially hump and radii) are smooth and clean. Remove any oxidized rubber, dried soap solution, rust, heavy paint, etc., with a wire brush. Repaint all bare metal with a rust inhibitor to retard detrimental effects of corrosion.

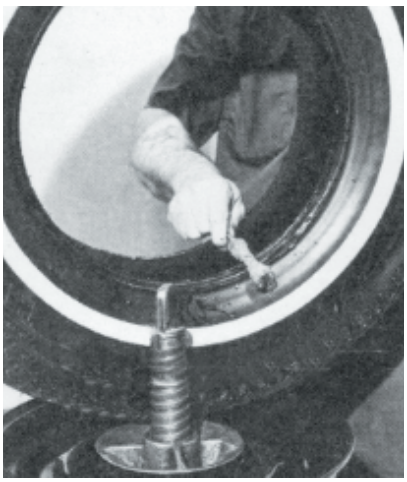
⚠ Follow procedures and safety precautions of the paint manufacturer.

⚠ Do not, under any circumstances, attempt to rework, weld, heat, or braze any rim base or wheel components.



2. Center the wheel on the changer and securely fasten it with the hold-down mechanism.

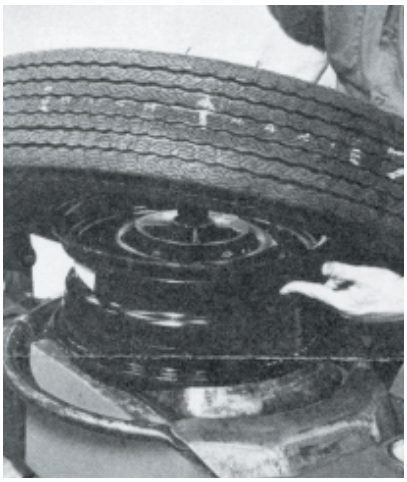
3. Replace the used valve stem with a new valve stem.



4. Inspect the inside of the tire casing and remove all tools, foreign objects, and/or liquids. With a brush or cloth lubricate sides and bases of top and bottom tire beads with a vegetable-based lubricant. Also lightly lubricate both sides of the rim from the safety hump to the top of the flange (where the beads will seat).

⚠ Tires with excessive or uneven wear, cracks, tears, punctures, blisters or other damage may explode during inflation or service. If tire failure potential is suspected destroy the tire and replace it with a known good tire of correct size, type and manufacturer for assembly, machine, and application.

⚠ Never use a petroleum-based lubricant. Use a vegetable-based lubricant only.



5. Push the bottom bead into the center well of the wheel, as shown above, and using the rotating arm of the mounting machine, mount the bottom bead of the tire onto the wheel.

⚠ Keep fingers clear of pinch points.

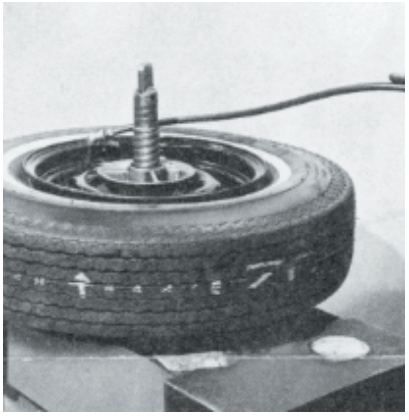
6.. Then push the top bead down into the center well of the wheel. Hold the tire in this position while rotating finger runs the bead onto the wheel. Center tire on rim.

7. Install the valve core.

⚠ Keep fingers clear of pinch points.

Mounting Standard Highway Trailer Wheel and Tire Assemblies (Tubeless Tires) (Cont.)

⚠ If you have any doubt in the correct, safe method of performing any step in the demounting, mounting, or inflating process **STOP!** Seek expert assistance from a qualified person.



8. Check to be sure the wheel is securely fastened to the changer by the hold-down mechanism.

9. Use an extension air hose with gauge and clip-on chuck to permit operator to stand clear of tire assembly.

Slowly inflate the tire to seat the beads (until the beads “pop” onto the bead ledge of the wheel).

⚠ DO NOT EXCEED 40 PSI TO SEAT BEADS.

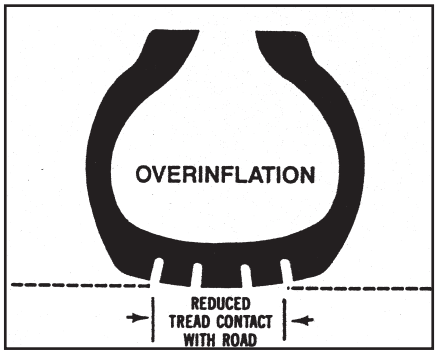
⚠ If assembly is incorrect - STOP - DEFLATE - CORRECT THE ASSEMBLY - repeat procedure.

⚠ Never attempt to seat beads or other components or correct component’s alignment by hammering, welding, heating or brazing.

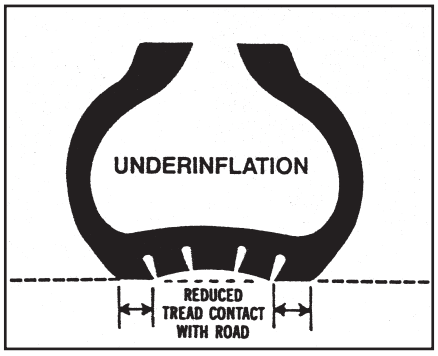
10. After seating beads and prior to inflating to recommended pressure, loosen the hold-down cone so that it and the tire assembly can be removed later.

⚠ Stand clear of trajectory zone when inflating (Page C)

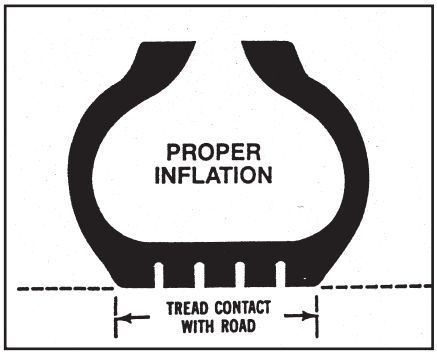
⚠ Do not exceed the manufacturer’s recommended operating inflation pressure.



OVERINFLATION
Causes tire to rim hard and makes them more vulnerable to impact and other road hazard damage. It also causes irregular wear.



UNDERINFLATION
Causes abnormal tire deflection, which builds up excessive heat, risking failure. It also causes irregular wear.



PROPER INFLATION
The correct profile for full contact with the road.

Demounting Standard Highway Trailer Wheel and Tire Assemblies (Tube Type Tires)

Tools required: valve core remover, bead breaker, tire changer machine

⚠ If you have any doubt in the correct, safe method of performing any step in the demounting, mounting, or inflating process **STOP!** Seek expert assistance from a qualified person.

⚠ Always completely deflate the tire by removing the valve core before attempting any demounting operation. Check the valve stem by running a piece of wire through the stem to make sure it is not plugged.

⚠ Stand clear of trajectory danger zone when deflating.

1. Remove all old balance weights from rim prior to demounting to prevent bead tearing from weight clip. Place tire in a horizontal position on changer, as shown.

⚠ Do not drop or throw tire onto the changer.

2. The wheel should be centered and securely fastened on the changer with the hold-down mechanism. In this illustration, the hold-down is a cone which the serviceperson is placing over the center shaft. Worn or damaged cones should be replaced.

3. Use a bead breaker, as shown, to loosen the upper tire bead from the upper rim flange. If the tire does not readily separate from the rim flange, apply a vegetable-based lubricant to the tire bead/rim flange area, rotate wheel and repeat this step.

⚠ Never use a petroleum-based lubricant. Use a vegetable-based lubricant only.

⚠ Never use a hammer to loosen the tire bead from the flange.

⚠ Check that the bottom bead breaker is making full contact with the tire. Contact with the wheel while breaking the bead may cause damage to the wheel or the demounting equipment.

⚠ Keep fingers clear of pinch points.

4. After beads are loosened from rim flanges, the inside of the wheel and both bead areas of the tire should be lubricated again. This makes it easy to remove the tire from the wheel without damage.

⚠ Never use a petroleum-based lubricant. Use a vegetable-based lubricant only.

5. Use a tire iron to bring the bead of the tire onto the rotating arm of the tire changer. Hold the tire bead in the center wheel well during this operation.

⚠ Never use a pipe or a make-shift bar.

⚠ Keep fingers clear of pinch points.

Demounting Standard Highway Trailer Wheel and Tire Assemblies (Tube Type Tires)

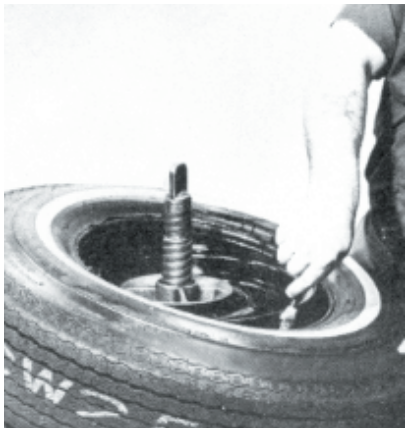
Tools required: valve core remover, bead breaker, tire changer machine

⚠ If you have any doubt in the correct, safe method of performing any step in the demounting, mounting, or inflating process **STOP!** Seek expert assistance from a qualified person.

⚠ Never use a petroleum-based lubricant. Use a vegetable-based lubricant only.

6. Start the tire changer to remove the top bead from the wheel. Properly lubricated, the bead will slip away from the rim flange of the wheel with ease if the tire bead is held in the center well of the wheel, as shown.

⚠ Keep fingers clear of pinch points.



7. Again lubricate the tire beads and bead seat areas of the wheel, including drop-center well of the wheel. This lubrication is necessary to enable the bead of the tire to slip down into the center well.

8. Use tire iron to raise bottom bead and bring it over the rotating arm of the changer. The side of the tire opposite the rotating finger must be down in the center well of the wheel and held in this position by the hip and hand.

⚠ Keep fingers clear of pinch points.

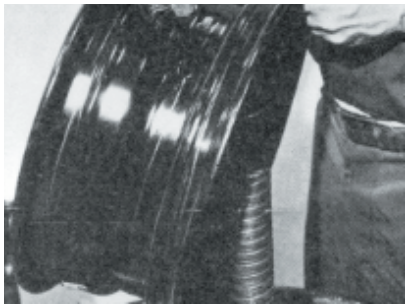
Mounting Standard Highway Trailer Wheel and Tire Assemblies (Tube Type Tires)

Tools required: Wire brush, valve stem insertion tool, valve core insertion tool, extension hose with in-line gauge and clip-on air chuck, air inflation gauge, vegetable-based lubricant, tire mounting machine

⚠ If you have any doubt in the correct, safe method of performing any step in the demounting, mounting, or inflating process **STOP!** Seek expert assistance from a qualified person.

⚠ ALWAYS replace a tire on a rim with another tire of exactly the same rim diameter designation.

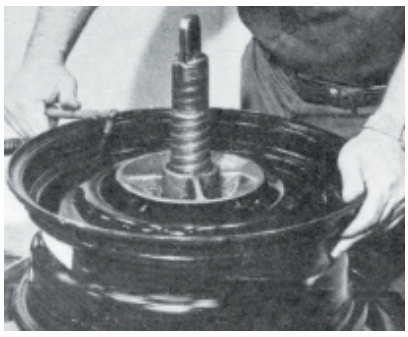
⚠ Rims of different diameters and tapers CANNOT be interchanged.



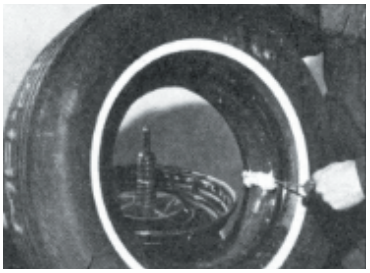
1. Never mount a tire on a rim that is damaged, or has been repaired by welding or brazing. Be certain that rim flanges and bead ledges (especially hump and round) are smooth and clean.

⚠ Follow procedures and safety precautions of the paint manufacturer.

⚠ Do not, under any circumstances, attempt to rework, weld, heat, or braze any rim base or wheel components.



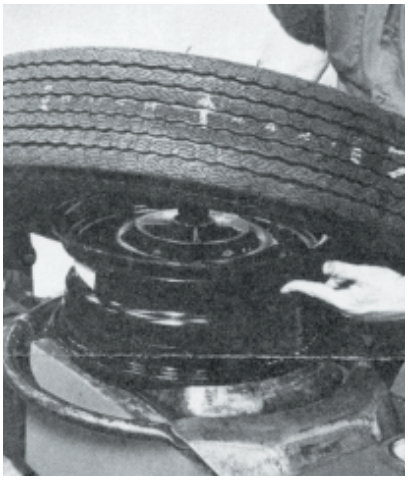
2. Center the wheel on the changer and securely fasten it with the hold-down mechanism.



3. Inspect the inside of the tire casing and remove all tools, foreign objects, and/or liquids. With a brush or cloth lubricate sides an bases of top and bottom tire beads with vegetable-based lubricant. Also lightly lubricate both sides of the rim from the bead hump to the top of the flange (where the beads will seat). Do not let lubricant run between the tire and tube.

⚠ Tires or tubes with excessive or uneven wear, cracks, tears, punctures, blisters or other damage may explode during inflation or service. If tire or tube has any damage as described above destroy tire or tube and replace it with a new tire or tube of correct size, type and manufacturer for assembly, machine and application.

⚠ Do not use petroleum-based lubricant. Use only vegetable-based lubricant.

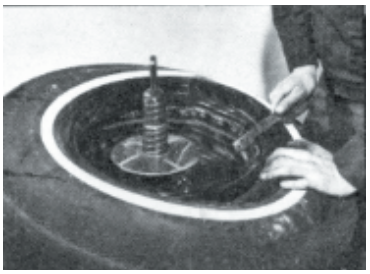


4. Push the bottom bead into the center well of the wheel, as shown above, and using the rotating arm of the mounting machine, mount the bottom bead of the tire onto the wheel.

⚠ Keep fingers clear of pinch points.

5. Insert Tube. Do not pinch the tube on the rim.

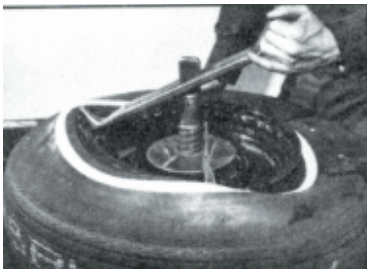
⚠ Keep fingers clear of pinch points.



6. After aligning tube valve with valve stem hole in rim, insert and center valve stem through stem hole in rim.

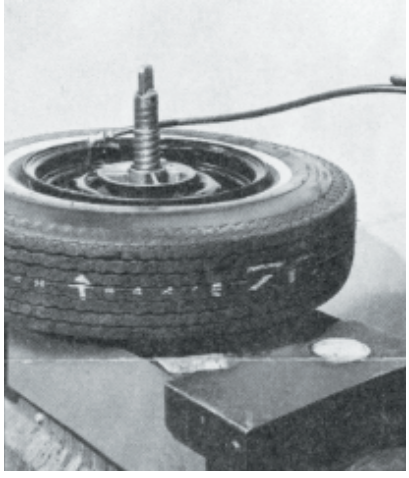
Mounting Standard Highway Trailer Wheel and Tire Assemblies (Tube Type Tires) (Cont.)

⚠ If you have any doubt in the correct, safe method of performing any step in the demounting, mounting, or inflating process **STOP!** Seek expert assistance from a qualified person.



7. Push the top bead down into the well of the wheel so that the bead in the valve area will be the last part of the bead to go over the rim flange. Hold the tire in this position while the rotating arm runs the bead onto the wheel. Be careful not to pinch or disturb the tube. Center the tire on the rim while also centering the valve stem in the valve hole. INSTALL THE VALVE CORE.

⚠ Keep fingers clear of pinch points.



8. Check to be sure the wheel is securely fastened to the changer by the hold-down mechanism.

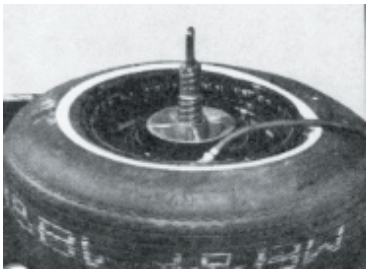
9. To prevent tube wrinkling or buckling, carefully remove valve core to completely deflate the tube. Reinsert valve core and firmly seat it.

10. Use an extension air hose with gauge and clip-on chuck to permit operator to stand clear of tire assembly. Slowly inflate the tire to seat the beads (until the beads "pop" onto the bead ledge of the wheel), and the recommended PSI.

⚠ DO NOT EXCEED 40 PSI TO SEAT BEADS.

⚠ If assembly is incorrect - STOP - DEFLATE - CORRECT THE ASSEMBLY - repeat procedure.

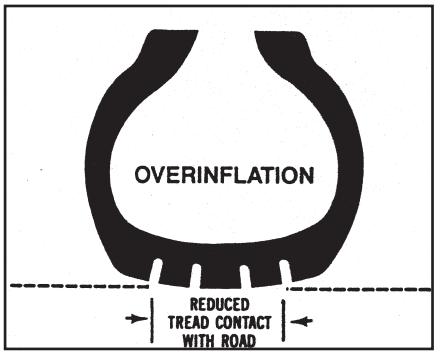
⚠ Never attempt to seat beads or other components or correct component's alignment by hammering, welding, heating or brazing.



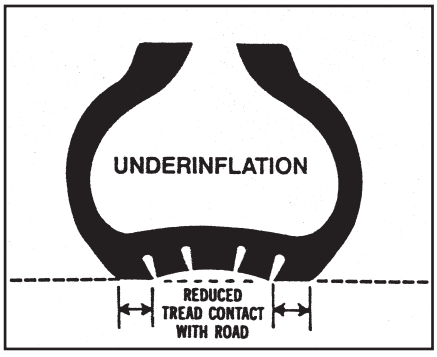
11. After partial inflation, loosen one-half turn the hold-down cone so that it and the tire assembly can be removed later. Inflate to the vehicle manufacturer's recommended operating inflation pressure.

⚠ Do not exceed manufacturer's recommended operating inflation pressure.

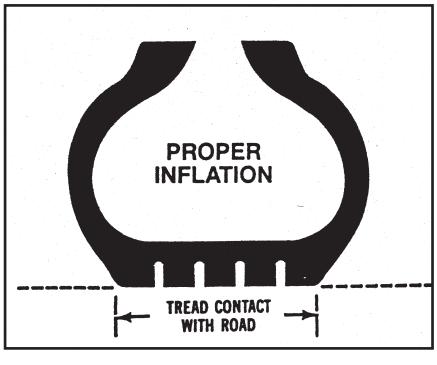
⚠ Stand clear of trajectory zone when inflating (Page C)



OVERINFLATION
Causes tire to rim hard and makes them more vulnerable to impact and other road hazard damage. It also causes irregular wear.



UNDERINFLATION
Causes abnormal tire deflection, which builds up excessive heat, risking failure. It also causes irregular wear.

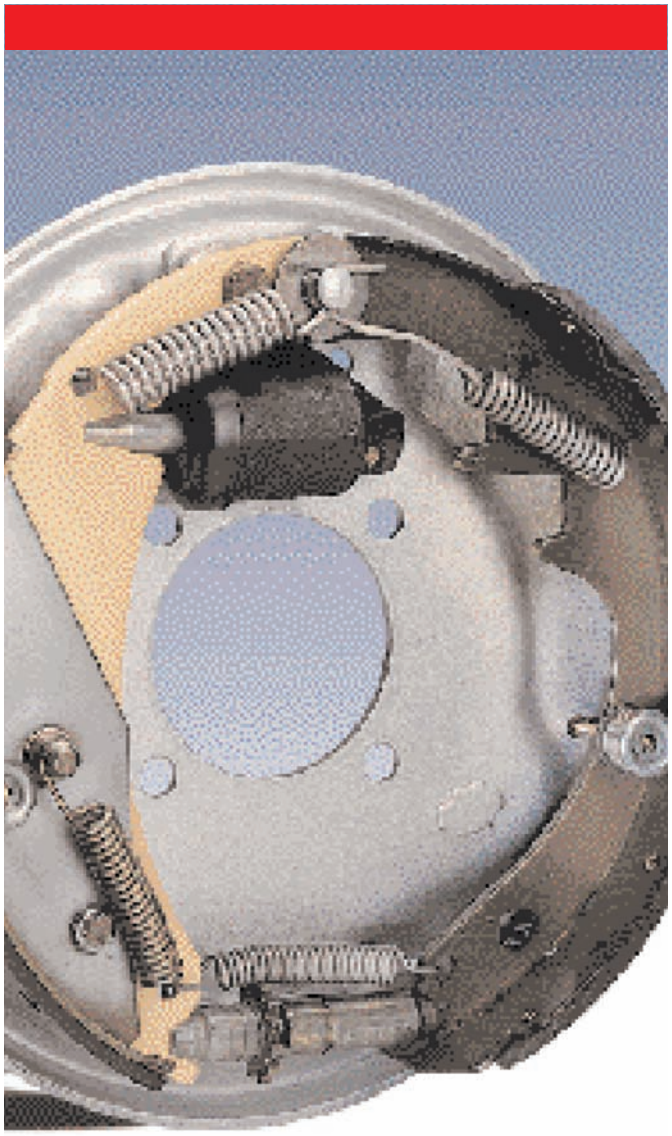


PROPER INFLATION
The correct profile for full contact with the road.

GALVANIZED IS GOOD

GALPHORITE™ IS SUPERIOR

TITAN PREMIER™ BRAKES



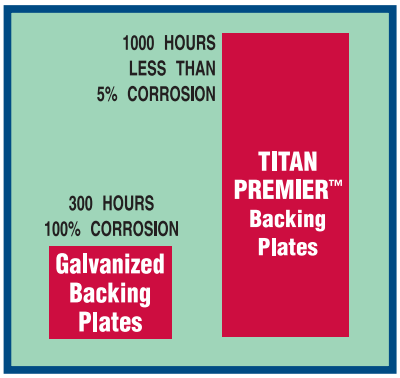
When It Comes To Corrosion Protection, Titan Brakes New Ground

Introducing the most corrosion-resistant marine brake ever made, the PREMIER™ Marine Brake. The backing plate and shoe levers of the PREMIER™ have been protected against corrosion using a process so advanced, Titan backs this marine brake with a two-year limited warranty against operational failure caused by corrosion.

Better Than Galvanized

First, the backing plate and shoe levers are sealed using an electrocoat primer - a patented process that actually uses electricity to permanently bond the paint to the surface of the parts - then the backing plates receive an additional coat of rugged acrylic making them virtually corrosion-proof. The wheel cylinders are treated with hot black oxide, and the internal components are zinc, olive drab plated. Stainless steel springs complete the package.

Galvanized Vs. GALPHORITE



The result is a marine brake so resistant to corrosion, even after 1,000 hours in metal-dissolving salt spray, the Galphorite treated parts show negligible corrosion. Galvanized parts are 100 percent corroded after only 300 hours in this same spray.

You Won't Find A Better Brake — Demand That Your Trailer Comes Equipped With Titan Premier Brakes

Premier brakes don't come at a premier cost, especially when you measure superior corrosion protection in extra miles. It's easy to spot PREMIER™ Marine Brakes. Just look for the distinctive silver backing plates - a sure sign that the latest in brake technology is at work to assure you of continued safe stops in all kinds of conditions.

PREMIER™ Marine Brakes are available in 10" and 12" sizes to fit most boat trailers and feature free backing design for use with Titan surge brake actuators.

TITAN

1-800-832-8781

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